

AUG 24 1999

Eco-Systems, Inc.

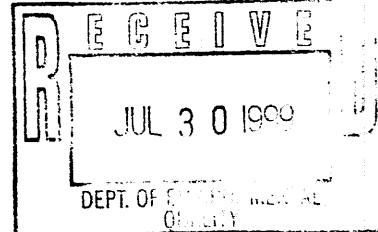
Consultants, Engineers and Scientists



January 15, 1999

Mr. Louis Crawford
Environmental Permits Division - Chemical, Agricultural, and Metal Manufacturing Branch
Mississippi Department of Environmental Quality - Office of Pollution Control
P.O. Box 10385
Jackson, Mississippi 39289-0385

Re: Quarterly Groundwater Sampling Report
 1st Quarterly Sampling Event (Q-4 98)
 HWMP No. HW-007-037-278
 Textron Automotive Company, Inc.
 Grenada, Grenada County, Mississippi



Dear Mr. Crawford:

This Quarterly Groundwater Sampling Report is submitted on behalf of the Textron Automotive Company, Inc. (Textron) to the Mississippi Department of Environmental Quality (MDEQ). The report presents the laboratory analytical results for groundwater samples collected during the first quarterly sampling event as required by the HWMP No. HW-007-037-278 for the Textron facility located in Grenada, Mississippi. The sampling was performed during November, 1998 (Q-4 98) for the groundwater monitoring wells installed adjacent to the SWMU#2. The document is provided in a three-ring binder that may be used for the incorporation of the future quarterly reports.

Although the data reveals detections of Trichloroethylene (TCE) and daughter breakdown products in the down-gradient wells, it should be noted that TCE was also detected in the up-gradient well. In addition, monitor well MW-2 appears to be cross-gradient and south of SWMU#2. Therefore, the sources of the detected organic constituents observed are believed to be from sources other than the SWMU#2. The data does not indicate a definitive release from the SWMU#2.

If you have any questions, please do not hesitate to call Mr. Don Williams at (601) 226-1161 or Caleb Dana at (601) 936-4440.

Very truly yours,
Eco-Systems, Inc.



Caleb H. Dana, Jr., P.E., CHMM
Principal Engineer

c: Mr. Don Williams w/copy

Eco-Systems, Inc.
Consultants, Engineers and Scientists



May 26, 1999

Mr. Don Williams
Plant Environmental Coordinator
Randall Division of Textron, Inc.
635 Highway 332
Grenada, Mississippi 38901

Re: Quarterly Groundwater Sampling Report
 2nd Quarterly Sampling Event (Q-1 99)
 HWMP No. HW-007-037-278
 Textron Automotive Company, Inc.
 Grenada, Mississippi

Dear Mr. Williams:

Enclosed please find a copy of the 2nd Quarterly (Q-1 99) Groundwater Sampling Report for the Textron Automotive Company, Inc. (Textron) facility located in Grenada, Mississippi. The report presents the laboratory analytical results for groundwater samples collected during the second quarterly sampling event as required by the HWMP No. HW-007-037-278 for Textron. The sampling was performed during February, 1999 (Q-1 99) for the groundwater monitoring wells installed adjacent to the SWMU#2. The document may be placed in the three-ring binder that was provided with the 1st quarterly report.

Please note that the HWMP requires submittal of data that is available be submitted by August 1, 1999 to the Mississippi Department of Environmental Quality (MDEQ). We will assist you with that submittal during July 1999.

We appreciate the opportunity to be of service to Textron Automotive Company, Inc. If you have any questions, please do not hesitate to call me.

Very truly yours,

A handwritten signature in black ink, appearing to read "Caleb H. Dana, Jr."

Caleb H. Dana, Jr., P.E., CHMM
Principal Engineer

Enclosure

1.0 INTRODUCTION

Eco Systems, Inc. (Eco Systems) has received final analytical results for the First Quarter, 1999 (Q-1 99) quarterly groundwater samples collected at Textron Automotive Company's (Textron) automotive parts plant in Grenada, Mississippi. This sampling and analysis effort represents Textron's second round of quarterly sampling required under Section IV. E.1 of Textron's Hazardous Waste Management (HWM) permit No. MSD007037278. Field activities were completed on February 4, 1999. This report may be filed in your RCRA Quarterly Groundwater Monitoring (Solid Waste Management Unit (SWMU) #2) binder provided with the Fourth Quarter, 1998 sampling report (dated January 15, 1999).

Background information pertaining to the Site may be referenced in the Fourth Quarter, 1998 report. Groundwater collection methodologies, sample identification rationale, analytical methods, quality assurance/quality control (QA/QC) procedures, and historical groundwater sampling results for the Site are included in the Fourth Quarter, 1999 report for review. Analytical results for the First Quarter, 1999 sampling event are presented in subsequent sections organized as follows:

- Investigative results of the Q-1 99 sampling event (Section 2.0); and
- A report summary and conclusions (Section 3.0).

2.0 GROUNDWATER SAMPLING RESULTS

Groundwater samples were collected from the four (4) monitoring wells specified in the permit on February 4, 1999 utilizing methods and procedures described in Section 2.0 of the Fourth Quarter, 1998 report. Each groundwater sample was analyzed for Appendix IX Volatile Organics, Semivolatiles Organics, and the eight (8) RCRA Metals. As presented below, detectable results of several compounds of concern (Table 1: Figure 1) were identified from groundwater collected during this event. Groundwater collection forms are provided in Appendix A and laboratory analytical data sheets may be found in Appendix B.

2.1 APPENDIX IX VOLATILES

Groundwater results received from the laboratory indicated that all four (4) of the wells sampled during this event revealed detectable concentrations (greater than the laboratory-derived practical quantitation limit (PQL) of 0.005 milligrams per liter (mg/L), equivalent to parts per million (ppm)), concentrations of at least one (1) of the Appendix IX Volatile Organic Compounds (VOCs; Table 1). Several chlorinated VOCs, including Tetrachloroethene (PCE), Trichloroethene (TCE), and several potentially associated degradation products, were identified in wells MW-2, MW-4, and MW-5. TCE was detected in each well at levels ranging from 0.0754 mg/L in MW-1 to 11.0 mg/L in MW-2. Several other "degradation products" including 1,1-Dichloroethane (1,1-DCA), 1,1-Dichloroethene (1,1-DCE), trans - 1,2-Dichloroethene (t,1,2-DCE), 1,1,1-Trichloroethane (1,1,1-TCA), and 1,1,2-Trichloroethane (1,1,2-TCA) were identified in a majority of the downgradient wells at levels up to 0.0357 mg/L (1,1-DCE, MW-5). Vinyl Chloride (VC), one of the final chlorinated degradation products of TCE, was detected in each of the downgradient wells at levels ranging from 0.506 mg/L (MW-5) to 0.928 mg/L (MW-2).

2.2 APPENDIX IX SEMIVOLATILES

As presented in Table 1, low level, laboratory-estimated (J-flagged (see 2.3 below)) analytical results were identified for three (3) Appendix IX Semivolatile Organic Compounds (SVOCs) in groundwater samples collected during this event. These low-level SVOCs include 2-Methylnaphthalene (0.00281 mg/L in groundwater collected from MW-2), Pentachlorophenol (0.00525 mg/L in groundwater collected from MW-2), and 1,2,4 Trichlorobenzene (0.0132 mg/L and 0.00522 mg/L, respectively, in groundwater collected from MW-2 and MW-5).

2.3 SELECT APPENDIX IX METALS

Two (2) of the four (4) wells sampled during this event revealed detectable levels (greater than the PQL, Table 1) of at least one (1) of the Appendix IX RCRA Metals. Wells MW-1 and MW-4, revealed non-detect (less than the PQL) levels of all listed metals. Total Chromium was detected in groundwater samples collected from downgradient wells MW-2 and MW-5 at concentrations of 26.5 mg/L and 0.128 mg/L,

respectively. Arsenic was revealed at a concentration of 0.0106 mg/L from groundwater collected from MW-2. All other listed metals were non-detect (less than the PQL) in groundwater collected from all wells sampled during Q-1 99 (Table 1).

2.4 GROUNDWATER FLOW PATTERNS

Water level elevation data obtained during this event is presented in Table 2. As shown on the potentiometric surface map in Figure 2, flow in the vicinity of the closed Equalization Lagoon is generally to the *northwest*. Although slightly deviant, this flow pattern appears to be generally consistent with historical patterns reviewed for the Site.

2.5 QA/QC RESULTS

QA/QC procedures were performed in accordance with Textron's QAPP to assure validity of sampling results. A total of one (1) duplicate sample (blind duplicate sample), one (1) trip blank sample, and one matrix spike/matrix spike duplicate (MS/MSD) sample was collected. Duplicate sample (with normal sample for comparison) results are shown in Table 3 and correspond well with the normal sample results. Trip blank results are also shown in Table 3.

An independent QA/QC review was performed on all analytical data collected during the current sampling event. Some samples (flagged with "*" in Table 3) contained high concentrations of target analytes which required the laboratory to dilute the sample in order to bring the analyte in question into the working quantitation range of the instrument used. As a result of this dilution, exact concentrations of the other target analytes in the sample cannot be accurately determined. Results flagged with an "*" were qualified as diluted. When results are provided for concentrations less than the diluted PQL, a "J" qualifier is flagged to indicate an estimated result.

No target analytes were detected in any of the laboratory blanks. In general, *Eco Systems* concluded that the laboratory analyses were conducted under well-controlled conditions, and with sufficient precision and accuracy to provide accurate analytical results.

3.0 SUMMARY AND CONCLUSIONS

Eco·Systems was commissioned by Textron to continue quarterly groundwater sampling and analysis in accordance with the facility's RCRA operating permit for the closed Equalization Lagoon. Water levels and groundwater samples were collected from four (4) monitoring wells on February 4, 1999 and analyzed for Appendix IX Volatiles, Semivolatiles, and selected Metals. The analytical results have been presented in tabular form (Table 1) as well as select compounds of concern illustrated on Figure 1. The potentiometric surface and resultant flow patterns were evaluated through the construction of a potentiometric surface map of the Site (Figure 2). Based on review of the groundwater data collected during Q-1 99, *Eco·Systems* presents the following summary and conclusions:

- The industrial solvent TCE was detected in wells MW-2, MW-5, and MW-4 at concentrations of 11.0 mg/L, 9.68 mg/L, and 0.163 mg/L, respectively. Associated chlorinated degradation products were also observed including VC, which was reported at levels ranging up to 0.928 mg/L in MW-2. The Maximum Contaminant Level (MCL; EPA, December, 1995) for TCE and VC are 0.005 mg/L and 0.002 mg/L, respectively.
- TCE was also detected in the background monitoring well, MW-1, at a concentration of 0.0754 mg/L.
- Elevated levels of the metal Chromium (total) were detected in groundwater samples collected from MW-2 and MW-5 at concentrations of 26.5 mg/L and 0.128 mg/L, respectively. The MCL for Total Chromium is 0.100 mg/L.
- Toluene and total Xylenes were identified in well MW-2 at concentrations of 0.0653 mg/L and 0.0405J mg/L, respectively. The MCLs for these constituents are 1.0 mg/L for Toluene, and 10.0 mg/L for Xylenes, respectively.
- The Appendix IX SVOAs 2-Methylnaphthalene, Pentachlorophenol, and 1,2,4 Trichlorobenzene were detected in groundwater samples collected during this event at concentrations ranging up to 0.0132 mg/L in MW-2.
- Groundwater flow across the Site is generally to the northwest.

TABLES

TABLE 1

GROUNDWATER ANALYTICAL RESULTS

RCRA GROUNDWATER MONITORING - FIRST QUARTER, 1999

TEXTRON AUTOMOTIVE, INC.

GRENADA, MISSISSIPPI

PARAMETER*	PQL ² (mg/L)	RESULT CONCENTRATION (mg/L) ³			
		MW-1	MW-2	MW-3	MW-5
APPENDIX IX VOLATILES (METHOD 8260)					
Benzene	0.250	ND ⁴	ND	ND	ND
Carbon Disulfide	0.005	0.00164	ND	ND	ND
Chloroethane	0.250	ND	ND	ND	ND
1,1 - Dichloroethane	0.250	ND	ND	ND	0.0222
1,1 - Dichloroethene	0.250	ND	0.0157J	ND	0.0357
trans - 1,2-Dichloroethene	0.250	ND	ND	0.0123J	0.0183
Tetrachloroethene	0.250	ND	0.0335J	ND	0.0128
Toluene	0.250	ND	0.0653	ND	ND
1,1,1 - Trichloroethane	0.250	ND	ND	ND	0.0118
1,1,2 - Trichloroethane	0.250	ND	ND	ND	0.00586
Trichloroethene	2.0	0.0754	11.0	0.163	9.68
Vinyl Chloride	0.500	ND	0.928	0.0703	0.506
Xylene (total)	0.25	ND	0.0405J	ND	ND
All Others Not Listed	0.250 - 25.0	ND	ND	ND	ND
APPENDIX IX SEMI-VOLATILES (METHOD 8270)					
2-Methylnaphthalene	0.010	ND	0.00281J	ND	ND
Pentachlorophenol	0.025	ND	0.00525J	ND	ND
1,2,4-Trichlorobenzene	0.010	ND	0.0132	ND	0.00522
All Other Compounds	0.010 - 0.050	ND	ND	ND	ND

TABLE 1 (Continued)
GROUNDWATER ANALYTICAL RESULTS
RCRA GROUNDWATER MONITORING - FIRST QUARTER, 1999
TEXTRON AUTOMOTIVE, INC.
GRENADA, MISSISSIPPI

PARAMETER ¹	PQL ² (mg/L)	RESULT CONCENTRATION (mg/L) ³			
		MW-1	MW-2	MW-4	MW-5
APPENDIX IX METALS (METHOD 6000/7000 SERIES)					
Arsenic	0.010	ND	0.0106	ND	ND
Barium	0.200	ND	ND	ND	ND
Cadmium	0.005	ND	ND	ND	ND
Chromium (total)	0.010	ND	26.5	ND	0.128
Lead	0.003	ND	ND	ND	ND
Mercury	0.0002	ND	ND	ND	ND
Selenium	0.005	ND	ND	ND	ND
Silver	0.010	ND	ND	ND	ND

¹ Groundwater samples were analyzed for Appendix IX List VOAs, SVOAs, and Metals. See Appendix C for full list results and detection limits.

² PQL = Practical quantitation limit, or detection limit, for the individual analyses.

³ Result concentrations are reported in milligrams per liter (mg/L), equivalent to parts per million (ppm).

⁴ Result was below the PQL, or "Non-Detect".

"J" = The sample was qualified as estimated due to necessary dilutions.

TABLE 2
POTENTIOMETRIC SURFACE DATA SHEET
RCRA GROUNDWATER MONITORING - FIRST QUARTER, 1999
TEXTRON AUTOMOTIVE, INC.
GRENADA, MISSISSIPPI

WELL NO.	TOC ELEVATION (ft. MSL) ¹	WATER DEPTH (feet) ²	GROUNDWATER ELEVATION (ft. MSL)
MW-1	185.18	12.90	172.28
MW-2	184.56	12.68	171.88
MW-3	184.00	11.93	172.07
MW-4	184.33	12.70	171.63
MW-5	184.17	12.45	171.72

¹ TOC = "top of well casing" measured in feet above mean sea level (ft. MSL). The protective metal casing was surveyed by others.

² Water depth is a relative depth from the TOC (PVC well).

TABLE 3
QA/QC ANALYTICAL RESULTS
RCRA GROUNDWATER MONITORING - FIRST QUARTER, 1999
TEXTRON AUTOMOTIVE, INC.
GRENADA, MISSISSIPPI

PARAMETER ¹	PQL (mg/L)	RESULT CONCENTRATIONS (mg/L)		
		Trip Blank	MW-2	Blind Duplicate (from MW-2)
APPENDIX IX VOLATILES (METHOD 8260)				
Benzene	0.005	ND ³	ND*	ND*
Chloroethane	0.005	ND	ND*	ND*
1,1 - Dichloroethane	0.005	ND	ND*	ND*
1,1 - Dichloroethene	0.005	ND	ND*	0.0147J
Ethylbenzene	0.050	ND	ND*	0.0373J
Methylene Chloride	0.005	ND	ND*	ND*
trans - 1,2-Dichloroethene	0.005	ND	ND*	ND*
Tetrachloroethene	0.005	ND	ND*	0.0336J
Toluene	0.005	ND	0.0653	0.0637
1,1,1 - Trichloroethane	0.005	ND	0.0163	ND*
1,1,2 - Trichloroethane	0.005	ND	ND*	ND*
Trichloroethene	0.005	ND	11.0	10.6
Vinyl Chloride	0.010	ND	0.928	0.876
Xylene (total)	0.005	ND	ND*	0.0417J
All Others Not Listed	0.005 - 0.500	ND	ND*	ND*
APPENDIX IX SEMI-VOLATILES (METHOD 8270)				
2-Methylnaphthalene	0.010	ND	0.00281J	0.00335J
Pentachlorophenol	0.025	ND	0.00525J	0.00452J
1,2,4-Trichlorobenzene	0.010	ND	0.0132	0.0175
All Other Compounds	0.010 - 0.050	ND	ND	ND

TABLE 3 (Continued)
QA/QC ANALYTICAL RESULTS
RCRA GROUNDWATER MONITORING - FIRST QUARTER, 1999
TEXTRON AUTOMOTIVE, INC.
GRENADA, MISSISSIPPI

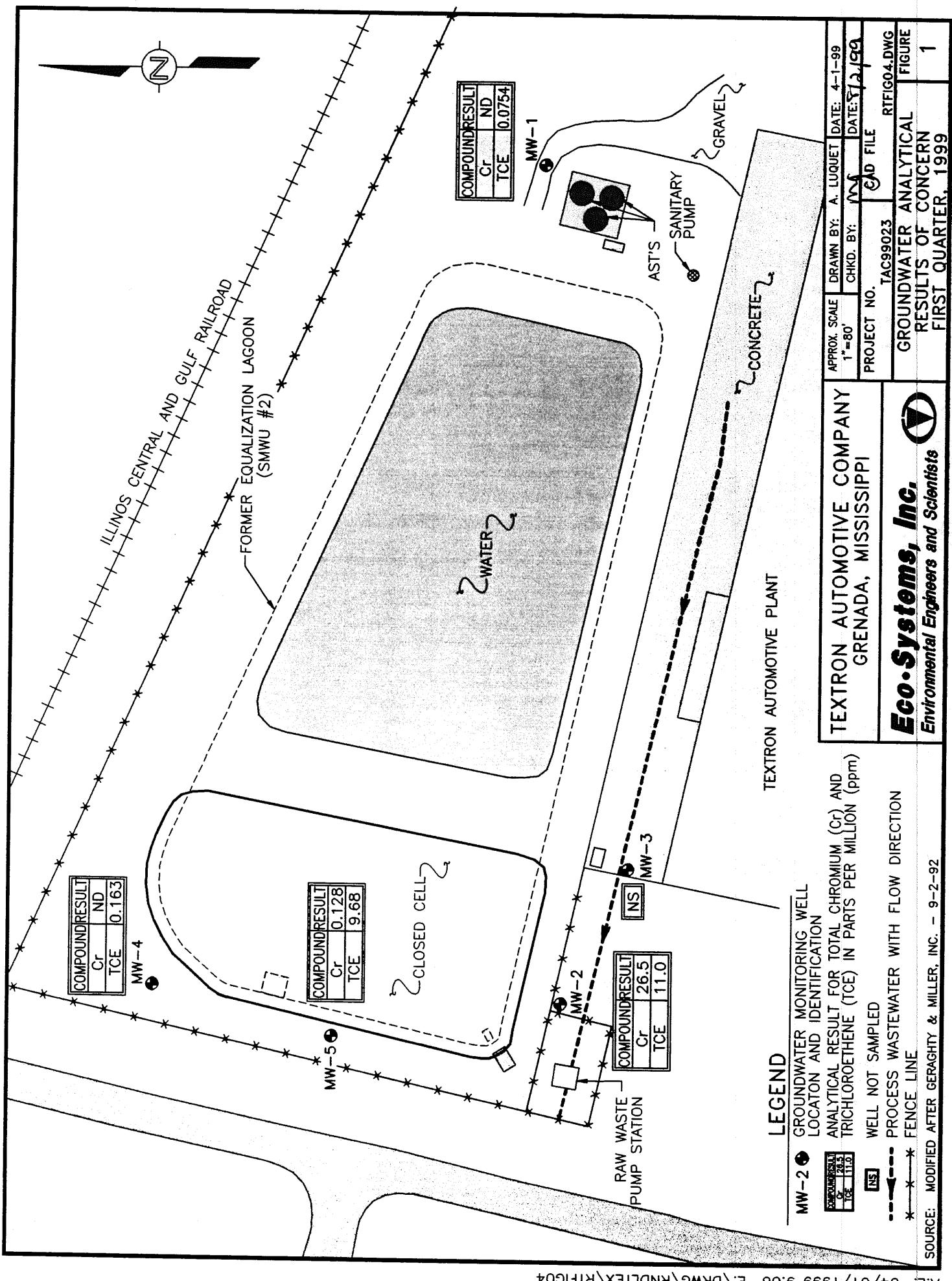
PARAMETER¹	PQL¹ (mg/L)	RESULT CONCENTRATIONS (mg/L)²		
		Trip Blank	MW-2	Bldd Duplicate (from MW-2)
APPENDIX IX METALS (METHOD 6000/7000 SERIES)				
Arsenic	0.010	NA	0.0106	ND
Barium	0.200	NA	ND	ND
Cadmium	0.010	NA	ND	ND
Chromium	0.010	NA	26.5	26.4
Lead	0.003	NA	ND	ND
Mercury	0.0002	NA	ND	ND
Selenium	0.005	NA	ND	ND
Silver	0.010	NA	ND	ND

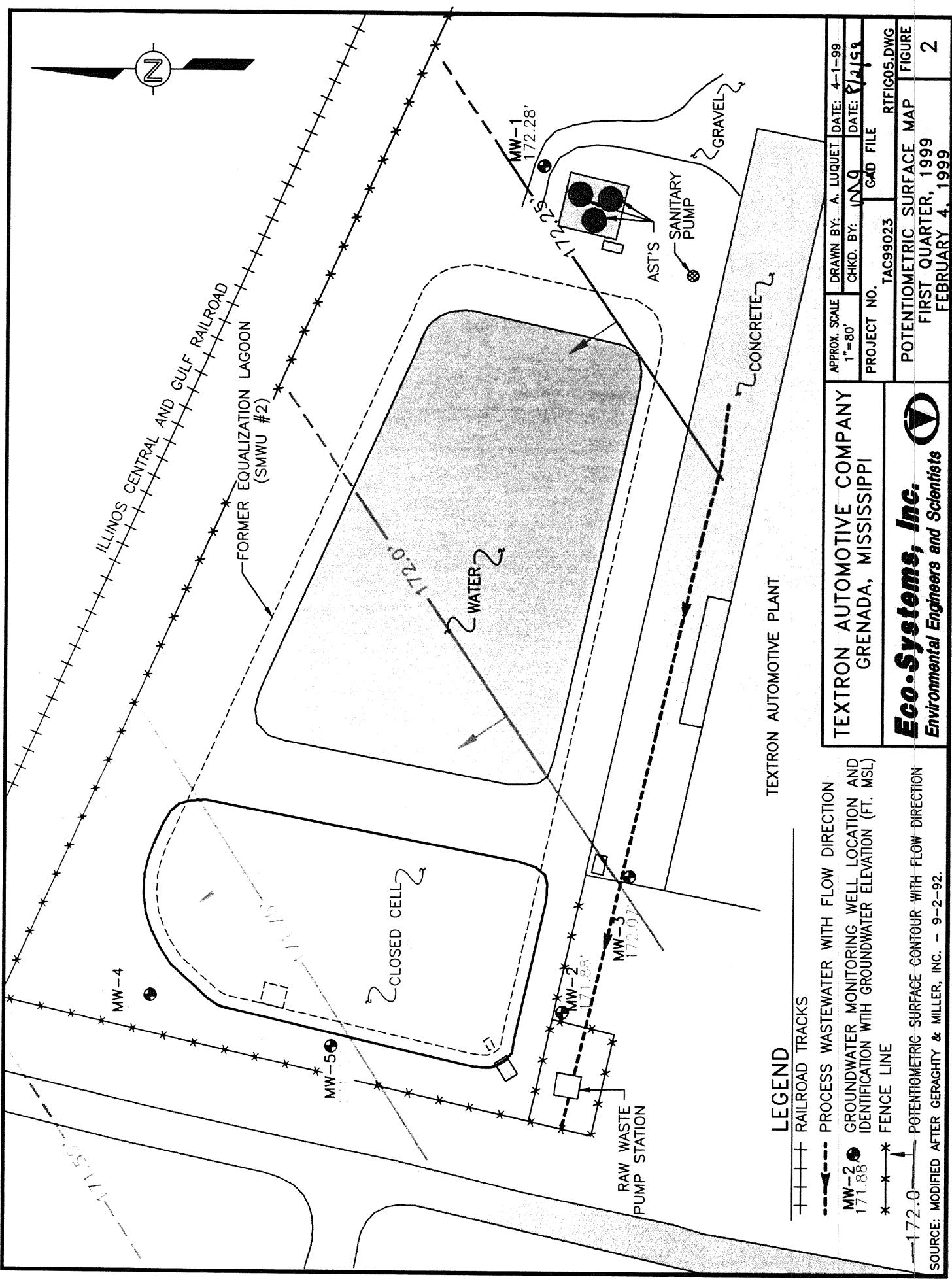
¹ PQL = Practical quantitation limit, or detection limit, for the individual analyses.

² Result concentrations are reported in milligrams per liter (mg/L), equivalent to parts per million (ppm).

³ Result was below the PQL, or "Non-Detect".

FIGURES





ATTACHMENT A

GROUNDWATER COLLECTION REPORTS

GROUNDWATER SAMPLE COLLECTION REPORT

PROJECT NAME Textron Q1 '99
 COLLECTOR (S) J2/WS

FIELD LOG

LOCATION Grenada, MS
 WELL IDENTIFICATION MW-1

MONITORING WELL DATA

TOP OF CASING TO STATIC WATER LEVEL 12.90'
 ELEVATION TOP OF CASING 185.18' TOP OF CASING TO BOTTOM 18.90'

MONITORING WELL EVACUATION

EVACUATION: (DATE/TIME) 2-4-99 11:52
 METHOD OF EVACUATION: Low-flow/Low-Stress w/ Peristaltic Pump
 PURGE/SAMPLING DEPTH (FEET B.T.O.C.) 12.5'
 TOTAL GALLONS EVACUATED: 1.8 Gallons
 WATER LEVEL FOLLOWING EVACUATION: 13.01'

MONITORING WELL SAMPLING

SAMPLING (DATE/TIME): 2-4-99 12:10
 METHOD OF SAMPLING: as above
 WATER LEVEL FOLLOWING SAMPLING: 12.99'

TYPE OF SAMPLE: _____ GRAB: COMPOSITE: _____ OTHER: _____

SAMPLE REPRESENTATIVENESS DATA

TIME: <u>1157</u>	CUMULATIVE VOLUME: <u>0.6 G.</u>	TEMP.: <u>18°C</u>	pH: <u>6.1</u>	CONDUCTIVITY: <u>660</u>	TURBIDITY: <u>3.2</u>
TIME: <u>1159</u>	CUMULATIVE VOLUME: <u>0.8</u>	TEMP.: <u></u>	pH: <u>5.8</u>	CONDUCTIVITY: <u>650</u>	TURBIDITY: <u>-</u>
TIME: <u>1201</u>	CUMULATIVE VOLUME: <u>1.0</u>	TEMP.: <u></u>	pH: <u>5.6</u>	CONDUCTIVITY: <u>670</u>	TURBIDITY: <u>-</u>
TIME: <u>1203</u>	CUMULATIVE VOLUME: <u>1.3</u>	TEMP.: <u></u>	pH: <u></u>	CONDUCTIVITY: <u></u>	TURBIDITY: <u>2.8</u>
TIME: <u>1205</u>	CUMULATIVE VOLUME: <u>1.6</u>	TEMP.: <u></u>	pH: <u></u>	CONDUCTIVITY: <u></u>	TURBIDITY: <u>-</u>
TIME: _____	CUMULATIVE VOLUME: _____	TEMP.: _____	pH: _____	CONDUCTIVITY: _____	TURBIDITY: _____

GENERAL INFORMATION

WEATHER CONDITIONS AT TIMES OF SAMPLING: Sunny & Mild
 SAMPLE IDENTIFICATION: TAC-SWMU2-FW-#1-#2
 CONTAINERS AND PRESERVATIVES: See Data Sheets
 COMMENTS AND OBSERVATIONS: Good Recharge.

RECOMMENDATIONS: _____

CERTIFICATION

SIGNATURE: [Signature] DATE: 2-10-99



GROUNDWATER SAMPLE COLLECTION REPORT

PROJECT NAME Textron Q1 '99
 COLLECTOR (S) J2/WS

FIELD LOG

LOCATION Freesta, MS
 WELL IDENTIFICATION MW-2

MONITORING WELL DATA

TOP OF CASING TO STATIC WATER LEVEL 12.68' TOP OF CASING TO BOTTOM -
 ELEVATION TOP OF CASING 184.56'

MONITORING WELL EVACUATION

EVACUATION: (DATE/TIME) 2-4-99 13:55

METHOD OF EVACUATION: Low - Flow / Low - Stress

PURGE/SAMPLING DEPTH (FEET B.T.O.C.) 15.0'

TOTAL GALLONS EVACUATED: 2.5 Gall.

WATER LEVEL FOLLOWING EVACUATION: 13.78'

MONITORING WELL SAMPLING

SAMPLING (DATE/TIME): 2-4-99 14:10

METHOD OF SAMPLING: 2-4-99 as above

WATER LEVEL FOLLOWING SAMPLING: 13.79'

TYPE OF SAMPLE: _____ GRAB: COMPOSITE: _____ OTHER: _____

SAMPLE REPRESENTATIVENESS DATA

TIME: <u>1404</u>	CUMULATIVE VOLUME: <u>1.0 G</u>	TEMP.: <u>18°C</u>	pH: <u>6.1</u>	CONDUCTIVITY: <u>470</u>	TURBIDITY: <u>3.4</u>
TIME: <u>1405</u>	CUMULATIVE VOLUME: <u>1.2</u>	TEMP.: <u></u>	pH: <u>5.6</u>	CONDUCTIVITY: <u>480</u>	TURBIDITY: <u>-</u>
TIME: <u>1406</u>	CUMULATIVE VOLUME: <u>1.4</u>	TEMP.: <u></u>	pH: <u>5.4</u>	CONDUCTIVITY: <u>490</u>	TURBIDITY: <u>-</u>
TIME: <u>1407</u>	CUMULATIVE VOLUME: <u>1.8</u>	TEMP.: <u></u>	pH: <u></u>	CONDUCTIVITY: <u>↓</u>	TURBIDITY: <u>2.1</u>
TIME: <u>1408</u>	CUMULATIVE VOLUME: <u>2.0</u>	TEMP.: <u></u>	pH: <u></u>	CONDUCTIVITY: <u>↓</u>	TURBIDITY: <u>-</u>
TIME: _____	CUMULATIVE VOLUME: _____	TEMP.: _____	pH: _____	CONDUCTIVITY: _____	TURBIDITY: _____

GENERAL INFORMATION

WEATHER CONDITIONS AT TIMES OF SAMPLING: Sunny & mild

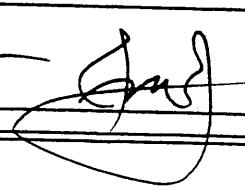
SAMPLE IDENTIFICATION: TAC-SUMU2-GW-Φ2-Φ2 w/ Duplicate (Φ2D)

CONTAINERS AND PRESERVATIVES: See Data Sheets → MS/MSD

COMMENTS AND OBSERVATIONS: Great Recharge; Green/Yellow Tint.

RECOMMENDATIONS: _____

CERTIFICATION

SIGNATURE: 

DATE: 2-4-99

Eco-Systems, Inc.



GROUNDWATER SAMPLE COLLECTION REPORT

PROJECT NAME Textron Q1 '99
COLLECTOR (S) JR/WS

FIELD LOG

LOCATION Grenada, MS
WELL IDENTIFICATION MW-4

MONITORING WELL DATA

TOP OF CASING TO STATIC WATER LEVEL 12.70' TOP OF CASING TO BOTTOM 22.10'
ELEVATION TOP OF CASING 184.33'

MONITORING WELL EVACUATION

EVACUATION: (DATE/TIME) 2-4-99 10:22
METHOD OF EVACUATION: LF/LS Initially w/ Total Withdrawal to TD
PURGE/SAMPLING DEPTH (FEET B.T.O.C.) 17.0'
TOTAL GALLONS EVACUATED: 1.5' (DRY)
WATER LEVEL FOLLOWING EVACUATION: ~DRY

MONITORING WELL SAMPLING

SAMPLING (DATE/TIME): 2-4-99 14:15
METHOD OF SAMPLING: as above from 16.5' btoc (Recharge)
WATER LEVEL FOLLOWING SAMPLING: N/A
TYPE OF SAMPLE: _____ GRAB: COMPOSITE: _____ OTHER: _____

SAMPLE REPRESENTATIVENESS DATA

TIME: _____ CUMULATIVE VOLUME: _____ TEMP.: _____ pH: _____ CONDUCTIVITY: _____ TURBIDITY: _____
TIME: _____ CUMULATIVE VOLUME: _____ TEMP.: _____ pH: _____ CONDUCTIVITY: _____ TURBIDITY: _____
TIME: _____ CUMULATIVE VOLUME: _____ TEMP.: _____ pH: _____ CONDUCTIVITY: _____ TURBIDITY: _____
TIME: _____ CUMULATIVE VOLUME: _____ TEMP.: _____ pH: _____ CONDUCTIVITY: _____ TURBIDITY: _____
TIME: _____ CUMULATIVE VOLUME: _____ TEMP.: _____ pH: _____ CONDUCTIVITY: _____ TURBIDITY: _____
TIME: _____ CUMULATIVE VOLUME: _____ TEMP.: _____ pH: _____ CONDUCTIVITY: _____ TURBIDITY: _____

GENERAL INFORMATION

WEATHER CONDITIONS AT TIMES OF SAMPLING: Sunny & mild
SAMPLE IDENTIFICATION: TAC-SUMUZ-GW-#4-Φ2
CONTAINERS AND PRESERVATIVES: See Data Sheets
COMMENTS AND OBSERVATIONS: Very Poor Recharge.

RECOMMENDATIONS: _____

CERTIFICATION

SIGNATURE: 

DATE: 2-10-99

Eco-Systems, Inc.



GROUNDWATER SAMPLE COLLECTION REPORT

PROJECT NAME TEXTRON Q1 '99
COLLECTOR (S) JR/WS

FIELD LOG

LOCATION GREENADA, MS
WELL IDENTIFICATION MW - 5

MONITORING WELL DATA

TOP OF CASING TO STATIC WATER LEVEL 12.45' TOP OF CASING TO BOTTOM 19.95'
ELEVATION TOP OF CASING 184.17'

MONITORING WELL EVACUATION

EVACUATION: (DATE/TIME) 2-4-99 / 10:00

METHOD OF EVACUATION: LOW-FLOW / LOW STRESS

PURGE/SAMPLING DEPTH (FEET B.T.O.C.) 16.5'

TOTAL GALLONS EVACUATED: 1 GALLON

WATER LEVEL FOLLOWING EVACUATION: 12.64'

MONITORING WELL SAMPLING

SAMPLING (DATE/TIME): 2-4-99 / 11:10

METHOD OF SAMPLING: AS ABOVE

WATER LEVEL FOLLOWING SAMPLING: 12.62'

TYPE OF SAMPLE: _____ GRAB: COMPOSITE: _____ OTHER: _____

SAMPLE REPRESENTATIVENESS DATA

TIME: <u>10 58</u>	CUMULATIVE VOLUME: <u>0.5 G</u>	TEMP.: <u>20 °C</u>	pH: <u>6.9</u>	CONDUCTIVITY: <u>710</u>	TURBIDITY: <u>3.2</u>
TIME: <u>11 02</u>	CUMULATIVE VOLUME: <u>0.7</u>	TEMP.: <u></u>	pH: <u>5.8</u>	CONDUCTIVITY: <u>700</u>	TURBIDITY: <u>-</u>
TIME: <u>11 04</u>	CUMULATIVE VOLUME: <u>0.8</u>	TEMP.: <u></u>	pH: <u>5.6</u>	CONDUCTIVITY: <u>730</u>	TURBIDITY: <u>-</u>
TIME: <u>11 06</u>	CUMULATIVE VOLUME: <u>0.9</u>	TEMP.: <u></u>	pH: <u>5.6</u>	CONDUCTIVITY: <u>730</u>	TURBIDITY: <u>-</u>
TIME: <u>11 08</u>	CUMULATIVE VOLUME: <u>1.0</u>	TEMP.: <u></u>	pH: <u>5.6</u>	CONDUCTIVITY: <u>730</u>	TURBIDITY: <u>-</u>
TIME: _____	CUMULATIVE VOLUME: _____	TEMP.: _____	pH: _____	CONDUCTIVITY: _____	TURBIDITY: _____

GENERAL INFORMATION

WEATHER CONDITIONS AT TIMES OF SAMPLING: SUNNY & MILD

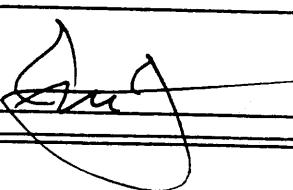
SAMPLE IDENTIFICATION: TAC-SWML 2 - GW-#5-#2

CONTAINERS AND PRESERVATIVES: SEE DATA SHEETS

COMMENTS AND OBSERVATIONS: GOOD RECHARGE

RECOMMENDATIONS: _____

CERTIFICATION

SIGNATURE: 

DATE: 2-10-99

Eco-Systems, Inc.



ATTACHMENT B

LABORATORY ANALYTICAL DATA SHEETS

Pace Analytical

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
St. Rose, LA 70087

Tel: 504-469-0333
Fax: 504-469-0555

March 26, 1999

Mr. John Ryan
Eco-Systems
4294 Lakeland Drive
Suite 200
Jackson, MS 39208

RE: Pace Episodes PGR and QHN

Dear John:

Enclosed please find revised result pages for Appendix 9 Volatiles and Semivolatiles. At your request, "J" flags were added to this report, thus indicating any hits between the reporting limit and detection limit.

I hope this information is helpful to you.

Sincerely,



Karen H. Brown
Client Services Manager

KHB/sn

QA3196

Pace Analytical

Pace Analytical Services, Inc.
1000 Riverbend Blvd, Suite F
St. Rose, LA 70087

Tel: 504-469-0333
Fax: 504-469-0555

John Ryan
Eco-Systems, Incorporated/MS
4294 Lakeland Drive
Suite 200
Jackson, MS 39208

Project: 1Q/99 GW SAMPLING
Site:
Episode: QHN

To: John Ryan

Enclosed please find the analytical results for sample(s) received by
Pace Analytical Services, Inc. - New Orleans.

This report contains a summary of the quality control data associated
with the analyses as well as copies of the chain-of-custody documents.

You may direct any inquiries concerning this report to your Project
Manager or any one of the Project Managers listed below:

Ms. Karen H. Brown, Manager, Ext. 325
Mr. William R. Shackelford, Ext. 326
Ms. Cindy Olavesen, Ext. 327

Sincerely,

William R. Shackelford
Project Manager

2-26-99
Date

Enclosures

Pace Analytical Services, Inc. - New Orleans
Sample Cross Reference Summary

Episode: QHN Client: Eco-Systems, Incorporated/MS

Project: 1Q/99 GW SAMPLING

Site: _____

Lab ID	Client ID	Description	Matrix	Collected	Received
QHN-001	TAC-SWMU2-GW-05-02		Water	02/04/99	02/05/99
QHN-002	TAC-SWMU2-GW-01-02		Water	02/04/99	02/05/99
QHN-003	TAC-SWMU2-GW-02-02		Water	02/04/99	02/05/99
QHN-004	TAC-SWMU2-GW-02-02D		Water	02/04/99	02/05/99
QHN-005	TAC-SWMU2-GW-MS-02	MATRIX SPIKE	Water	02/04/99	02/05/99
QHN-006	TAC-SWMU2-GW-MSD-02	MATRIX SPIKE DUPLICATE	Water	02/04/99	02/05/99
QHN-007	TAC-SWMU2-GW-04-02		Water	02/04/99	02/05/99
QHN-008	TAC-SWMU2-TB-02		Water	02/04/99	02/05/99

Narrative for Episode OHN

Volatile Organics

An alternate ion was used to quantitate the surrogate d8-toluene due to interferences in sample QHN-001; trichloroethene and vinyl chloride were above the calibration range in this analysis. The concentration of vinyl chloride was below the reporting limit in the dilution; therefore the result for this target is based upon the original analysis.

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-05-02

Project: 1Q/99 GW SAMPLING

Lab ID: QHN-001

Description: None

Method: SW 8260 Appendix IX Volatile Organics

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Episode: QHN

Sample Qu: D1

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 29306

Units: ug/l

Target List: 8260AP9WAT

Prep Factor: 1.00

Leached: n/a

Prepared:

Analyzed: 13-Feb-99 1:35 KC

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
67-64-1	Acetone (2-Propanone, Dimethyl ketone)	1	ND	N	10.0	
75-05-8	Acetonitrile (Methyl cyanide)	1	ND	N	50.0	
107-02-8	Acrolein (2-Propenal)	1	ND	N	10.0	
107-13-1	Acrylonitrile (2-Propenenitrile)	1	ND	N	10.0	
107-05-1	Allyl chloride (3-Chloropropene)	1	ND	N	5.00	
71-43-2	Benzene	1	ND	N	5.00	
75-27-4	Bromodichloromethane	1	ND	N	5.00	
75-25-2	Bromoform	1	ND	N	5.00	
74-83-9	Bromomethane (Methyl bromide)	1	ND	N	10.0	
78-93-3	2-Butanone (Methyl ethyl ketone)	1	ND	N	10.0	
75-15-0	Carbon disulfide	1	ND	N	5.00	
56-23-5	Carbon tetrachloride	1	ND	N	5.00	
108-90-7	Chlorobenzene	1	ND	N	5.00	
75-00-3	Chloroethane	1	ND	N	10.0	
67-66-3	Chloroform	1	ND	N	5.00	
74-87-3	Chloromethane (Methyl chloride)	1	ND	N	10.0	
126-99-8	Chloroprene (2-Chloro-1,3-butadiene)	1	ND	N	50.0	
124-48-1	Dibromochloromethane	1	ND	N	5.00	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	1	ND	N	5.00	
106-93-4	1,2-Dibromoethane (Ethylene dibromide)	1	ND	N	5.00	
74-95-3	Dibromomethane (Methylene bromide)	1	ND	N	5.00	
110-57-6	trans-1,4-Dichloro-2-butene	1	ND	N	5.00	
75-71-8	Dichlorodifluoromethane (Freon 12)	1	ND	N	50.0	
75-34-3	1,1-Dichloroethane	1	22.2	N	5.00	
107-06-2	1,2-Dichloroethane (Ethylene dichloride)	1	ND	N	5.00	
75-35-4	1,1-Dichloroethene (Dichloroethylene)	1	35.7	N	5.00	
156-60-5	trans-1,2-Dichloroethene	1	18.3	N	5.00	
78-87-5	1,2-Dichloropropane	1	ND	N	5.00	
10061-01-5	cis-1,3-Dichloropropene	1	ND	N	5.00	
10061-02-6	trans-1,3-Dichloropropene	1	ND	N	5.00	
123-91-1	1,4-Dioxane	1	ND	N	500	
100-41-4	Ethylbenzene	1	ND	N	5.00	
591-78-6	2-Hexanone	1	ND	N	10.0	
74-88-4	Iodomethane (Methyl iodide)	1	ND	N	5.00	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:50:18

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans
Single Sample - Protocol

Client ID: TAC-SWMU2-GW-05-02

Project: 1Q/99 GW SAMPLING

Lab ID: QHN-001

Description: None

Method: SW 8260 Appendix IX Volatile Organics

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Episode: QHN **Sample Qu:** D1

Matrix: Water **% Moisture:** n/a

Prep Level: Water **Batch:** 29306

Units: ug/l **Target List:** 8260AP9WAT

Prep Factor: 1.00

Leached: n/a

Prepared:

Analyzed: 13-Feb-99 1:35 KC

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
78-83-1	2-Methyl-1-propanol (iso-Butyl alcohol)	1	ND	N	500	
126-98-7	Methacrylonitrile	1	ND	N	5.00	
75-09-2	Methylene chloride (Dichloromethane)	1	ND	N	5.00	
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND	N	10.0	
107-12-0	Propionitrile (Ethyl cyanide)	1	ND	N	10.0	
100-42-4	Styrene	1	ND	N	5.00	
630-20-6	1,1,1,2-Tetrachloroethane	1	ND	N	5.00	
79-34-5	1,1,2,2-Tetrachloroethane	1	ND	N	5.00	
127-18-4	Tetrachloroethene (Perchloroethylene)	1	12.8	N	5.00	
108-88-3	Toluene	1	ND	N	5.00	
71-55-6	1,1,1-Trichloroethane (Methyl chloroform)	1	11.8	N	5.00	
79-00-5	1,1,2-Trichloroethane	1	5.86	N	5.00	
79-01-6	Trichloroethene (Trichloroethylene)	400	9680	D1	2000	
75-69-4	Trichlorofluoromethane (Freon 11)	1	ND	N	5.00	
96-18-4	1,2,3-Trichloropropane	1	ND	N	5.00	
108-05-4	Vinyl acetate	1	ND	N	10.0	
75-01-4	Vinyl chloride (Chloroethylene)	1	506	N	10.0	
1330-20-7	Xylene (total)	1	ND	N	5.00	

52 compound(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:50:22

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-05-02

Project: 1Q/99 GW SAMPLING

Lab ID: QHN-001

Description: None

Method: SW 8270 Appendix IX Semivolatile Organics

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Episode: QHN

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Factor: 1.00

Leached: n/a

Prep Level: Water

Batch: 29335

Units: ug/l

Target List: 8270AP9WAT

Prepared: 11-Feb-99

Analyzed: 23-Feb-99 21:53 JA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
83-32-9	Acenaphthene	1	ND		10.0	
208-96-8	Acenaphthylene	1	ND		10.0	
98-86-2	Acetophenone	1	ND		10.0	
53-96-3	2-Acetylaminofluorene	1	ND		10.0	
92-67-1	4-Aminobiphenyl	1	ND		10.0	
62-53-3	Aniline (Benzeneamine)	1	ND		10.0	
120-12-7	Anthracene	1	ND		10.0	
140-57-8	Aramite	1	ND		10.0	
56-55-3	Benzo(a)anthracene	1	ND		10.0	
205-99-2	Benzo(b)fluoranthene	1	ND		10.0	
207-08-09	Benzo(k)fluoranthene	1	ND		10.0	
191-24-2	Benzo(g,h,i)perylene	1	ND		10.0	
50-32-8	Benzo(a)pyrene	1	ND		10.0	
100-51-6	Benzyl alcohol	1	ND		10.0	
101-55-3	4-Bromophenyl phenyl ether	1	ND		10.0	
85-68-7	Butylbenzylphthalate	1	ND		10.0	
88-85-7	2-sec-Butyl-4,6-dinitrophenol (Dinoseb)	1	ND		10.0	
106-47-8	4-Chloroaniline (p-Chloroaniline)	1	ND		10.0	
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	
108-60-1	bis(2-Chloroisopropyl) ether	1	ND		10.0	
59-50-7	4-Chloro-3-methylphenol (p-Chloro-m-cresol)	1	ND		10.0	
91-58-7	2-Chloronaphthalene	1	ND		10.0	
95-57-8	2-Chlorophenol (o-Chlorophenol)	1	ND		10.0	
7005-72-3	4-Chlorophenyl phenyl ether	1	ND		10.0	
218-01-9	Chrysene	1	ND		10.0	
53-70-3	Dibenz(a,h)anthracene	1	ND		10.0	
132-64-9	Dibenzofuran	1	ND		10.0	
84-74-2	Di-n-butylphthalate	1	ND		10.0	
95-50-1	1,2-Dichlorobenzene (o-Dichlorobenzene)	1	ND		10.0	
541-73-1	1,3-Dichlorobenzene (m-Dichlorobenzene)	1	ND		10.0	
106-46-7	1,4-Dichlorobenzene (p-Dichlorobenzene)	1	ND		10.0	
91-94-1	3,3'-Dichlorobenzidine	1	ND		20.0	
120-83-2	2,4-Dichlorophenol	1	ND		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.
 Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:50:27

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans
Single Sample - Protocol

Client ID: TAC-SWMU2-GW-05-02

Project: 1Q/99 GW SAMPLING

Lab ID: OHN-001

Description: None

Method: SW 8270 Appendix IX Semivolatile Organics

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Episode: QHN

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 29335

Units: ug/l

Target List: 8270AP9WAT

Prep Factor: 1.00

Leached: n/a

Prepared: 11-Feb-99

Analyzed: 23-Feb-99 21:53 JA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
87-65-0	2,6-Dichlorophenol	1	ND		10.0	
84-66-2	Diethylphthalate	1	ND		10.0	
60-11-7	p-(Dimethylamino)azobenzene	1	ND		10.0	
57-97-6	7,12-Dimethylbenz(a)anthracene	1	ND		10.0	
119-93-7	3,3'-Dimethylbenzidine	1	ND		10.0	
122-09-8	alpha, alpha- Dimethylphenethylamine	1	ND		10.0	
105-67-9	2,4-Dimethylphenol	1	ND		10.0	
131-11-3	Dimethylphthalate	1	ND		10.0	
99-65-0	1,3-Dinitrobenzene (m-Dinitrobenzene)	1	ND		10.0	
534-52-1	4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	1	ND		25.0	
51-28-5	2,4-Dinitrophenol	1	ND		25.0	
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	
117-84-0	Di-n-octylphthalate	1	ND		10.0	
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	
97-63-2	Ethyl methacrylate (2-Propenoic acid)	1	ND		10.0	
62-50-0	Ethyl methanesulfonate	1	ND		10.0	
206-44-0	Fluoranthene	1	ND		10.0	
86-73-7	Fluorene	1	ND		10.0	
118-74-1	Hexachlorobenzene	1	ND		10.0	
87-68-3	Hexachlorobutadiene	1	ND		10.0	
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	
67-72-1	Hexachloroethane	1	ND		10.0	
70-30-4	Hexachlorophene	1	ND		10.0	
1888-71-7	Hexachloropropene	1	ND		10.0	
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		10.0	
78-59-1	Isophorone	1	ND		10.0	
120-58-1	Isosafrole	1	ND		10.0	
91-80-5	Methapyrilene	1	ND		10.0	
56-49-5	3-Methylcholanthrene	1	ND		10.0	
80-62-6	Methyl methacrylate	1	ND		10.0	
66-27-3	Methyl methanesulfonate	1	ND		10.0	
91-57-6	2-Methylnaphthalene	1	ND		10.0	
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:50:31

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-05-02

Client: ECO-SYSTEMS, INCORPORATED/MS

Project: 1Q/99 GW SAMPLING

Site: None

Lab ID: QHN-001

Episode: QHN

Sample Qu:

Description: None

Matrix: Water

% Moisture: n/a

Method: SW 8270 Appendix IX Semivolatile Organics

Prep Level: Water

Batch: 29335

Units: ug/l

Target List: 8270AP9WAT

Prep Factor: 1.00

Leached: n/a

Prepared: 11-Feb-99

Analyzed: 23-Feb-99 21:53 JA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
108-39-4	3-Methylphenol (m-Cresol)	1	ND	A7	10.0	
106-44-5	4-Methylphenol (p-Cresol)	1	ND		10.0	
91-20-3	Naphthalene	1	ND		10.0	
134-32-7	1-Naphthaleneamine (1-Naphthylamine)	1	ND		10.0	
91-59-8	2-Naphthaleneamine (2-Naphthylamine)	1	ND		10.0	
130-15-4	1,4-Naphthoquinone	1	ND		50.0	
88-74-4	2-Nitroaniline (o-Nitroaniline)	1	ND		25.0	
99-09-2	3-Nitroaniline (m-Nitroaniline)	1	ND		25.0	
100-01-6	4-Nitroaniline (p-Nitroaniline)	1	ND		25.0	
98-95-3	Nitrobenzene	1	ND		10.0	
88-75-5	2-Nitrophenol (o-Nitrophenol)	1	ND		10.0	
100-02-7	4-Nitrophenol (p-Nitrophenol)	1	ND		25.0	
56-57-2	4-Nitroquinoline-1-oxide	1	ND		10.0	
924-16-3	N-Nitrosodi-n-butylamine	1	ND		10.0	
55-18-5	N-Nitrosodiethylamine	1	ND		10.0	
62-75-9	N-Nitrosodimethylamine	1	ND		10.0	
86-30-6	N-Nitrosodiphenylamine (Diphenylamine)	1	ND	A10	10.0	
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	
10595-95-6	N-Nitrosomethylmethyldamine	1	ND		10.0	
59-89-2	N-Nitrosomorpholine	1	ND		10.0	
100-75-4	N-Nitrosopiperidine	1	ND		10.0	
930-55-2	N-Nitrosopyrrolidine	1	ND		10.0	
99-55-8	5-Nitro-o-toluidine	1	ND		10.0	
608-93-5	Pentachlorobenzene	1	ND		10.0	
76-01-7	Pentachloroethane	1	ND		10.0	
82-68-8	Pentachloronitrobenzene	1	ND		10.0	
87-86-5	Pentachlorophenol	1	ND		25.0	
62-44-2	Phenacetin	1	ND		10.0	
85-01-8	Phenanthrene	1	ND		10.0	
108-95-2	Phenol	1	ND		10.0	
106-50-3	p-Phenylenediamine	1	ND		10.0	
109-06-08	2-Picoline (2-Methylpyridine)	1	ND		10.0	
23950-58-5	Pronamide	1	ND		10.0	
129-00-0	Pyrene	1	ND		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:50:35

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-05-02

Client: ECO-SYSTEMS, INCORPORATED/MS

Project: 1Q/99 GW SAMPLING

Site: None

Lab ID: QHN-001

Episode: QHN

Sample Qu:

Description: None

Matrix: Water

% Moisture: n/a

Method: SW 8270 Appendix IX Semivolatile Organics

Prep Level: Water

Batch: 29335

Prep Factor: 1.00

Leached: n/a

Prepared: 11-Feb-99

Target List: 8270AP9WAT

Analyzed: 23-Feb-99 21:53 JA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
110-86-1	Pyridine	1	ND		10.0	
94-59-7	Safrole	1	ND		10.0	
95-94-3	1,2,4,5-Tetrachlorobenzene	1	ND		10.0	
58-90-2	2,3,4,6-Tetrachlorophenol	1	ND		10.0	
95-53-4	o-Toluidine	1	ND		10.0	
120-82-1	1,2,4-Trichlorobenzene	1	5.22	J	10.0	
95-95-4	2,4,5-Trichlorophenol	1	ND		25.0	
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	
99-35-4	1,3,5-Trinitrobenzene (sym-Trinitrobenzene)	1	ND		10.0	

111 compound(s) reported

Revision 1

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-01-02
 Project: 1Q/99 GW SAMPLING
 Lab ID: QHN-002
 Description: None
 Method: SW 8260 Appendix IX Volatile Organics

Client: ECO-SYSTEMS, INCORPORATED/MS
 Site: None
 Episode: QHN Sample Qu:
 Matrix: Water % Moisture: n/a
 Prep Level: Water Batch: 29306
 Units: ug/l Target List: 8260AP9WAT
 Prepared: Analyzed: 13-Feb-99 17:33 KC

Prep Factor: 1.00

Leached: n/a

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
67-64-1	Acetone (2-Propanone, Dimethyl ketone)	1	ND		10.0	
75-05-8	Acetonitrile (Methyl cyanide)	1	ND		50.0	
107-02-8	Acrolein (2-Propenal)	1	ND		10.0	
107-13-1	Acrylonitrile (2-Propenenitrile)	1	ND		10.0	
107-05-1	Allyl chloride (3-Chloropropene)	1	ND		5.00	
71-43-2	Benzene	1	ND		5.00	
75-27-4	Bromodichloromethane	1	ND		5.00	
75-25-2	Bromoform	1	ND		5.00	
74-83-9	Bromomethane (Methyl bromide)	1	ND		10.0	
78-93-3	2-Butanone (Methyl ethyl ketone)	1	ND		10.0	
75-15-0	Carbon disulfide	1	ND		10.0	
56-23-5	Carbon tetrachloride	1	1.64 J		5.00	
108-90-7	Chlorobenzene	1	ND		5.00	
75-00-3	Chloroethane	1	ND		5.00	
67-66-3	Chloroform	1	ND		10.0	
74-87-3	Chloromethane (Methyl chloride)	1	ND		5.00	
126-99-8	Chloroprene (2-Chloro-1,3-butadiene)	1	ND		10.0	
124-48-1	Dibromochloromethane	1	ND		50.0	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	1	ND		5.00	
106-93-4	1,2-Dibromoethane (Ethylene dibromide)	1	ND		5.00	
74-95-3	Dibromomethane (Methylene bromide)	1	ND		5.00	
110-57-6	trans-1,4-Dichloro-2-butene	1	ND		5.00	
75-71-8	Dichlorodifluoromethane (Freon 12)	1	ND		50.0	
75-34-3	1,1-Dichloroethane	1	ND		5.00	
107-06-2	1,2-Dichloroethane (Ethylene dichloride)	1	ND		5.00	
75-35-4	1,1-Dichloroethene (Dichloroethylene)	1	ND		5.00	
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00	
78-87-5	1,2-Dichloropropane	1	ND		5.00	
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00	
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00	
123-91-1	1,4-Dioxane	1	ND		500	
100-41-4	Ethylbenzene	1	ND		5.00	
591-78-6	2-Hexanone	1	ND		10.0	
74-88-4	Iodomethane (Methyl iodide)	1	ND		5.00	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:50:43

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-01-02

Client: ECO-SYSTEMS, INCORPORATED/MS

Project: 1Q/99 GW SAMPLING

Site: None

Lab ID: QHN-002

Episode: QHN

Sample Qu:

Description: None

Matrix: Water

% Moisture: n/a

Method: SW 8260 Appendix IX Volatile Organics

Prep Level: Water

Batch: 29306

Units: ug/l

Target List: 8260AP9WAT

Prep Factor: 1.00

Leached: n/a

Prepared:

Analyzed: 13-Feb-99 17:33 KC

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
78-83-1	2-Methyl-1-propanol (iso-Butyl alcohol)	1	ND		500	
126-98-7	Methacrylonitrile	1	ND		5.00	
75-09-2	Methylene chloride (Dichloromethane)	1	ND		5.00	
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	
107-12-0	Propionitrile (Ethyl cyanide)	1	ND		10.0	
100-42-4	Styrene	1	ND		5.00	
630-20-6	1,1,1,2-Tetrachloroethane	1	ND		5.00	
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	
127-18-4	Tetrachloroethene (Perchloroethylene)	1	ND		5.00	
108-88-3	Toluene	1	ND		5.00	
71-55-6	1,1,1-Trichloroethane (Methyl chloroform)	1	ND		5.00	
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	
79-01-6	Trichloroethene (Trichloroethylene)	1	75.4		5.00	
75-69-4	Trichlorofluoromethane (Freon 11)	1	ND		5.00	
96-18-4	1,2,3-Trichloropropane	1	ND		5.00	
108-05-4	Vinyl acetate	1	ND		10.0	
75-01-4	Vinyl chloride (Chloroethylene)	1	ND		10.0	
1330-20-7	Xylene (total)	1	ND		5.00	

52 compound(s) reported

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-01-02

Project: 1Q/99 GW SAMPLING

Lab ID: QHN-002

Description: None

Method: SW 8270 Appendix IX Semivolatile Organics

Prep Factor: 1.00

Leached: n/a

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Episode: QHN

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 29335

Units: ug/l

Target List: 8270AP9WAT

Prepared: 11-Feb-99

Analyzed: 23-Feb-99 22:40 JA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
83-32-9	Acenaphthene	1	ND		10.0	
208-96-8	Acenaphthylene	1	ND		10.0	
98-86-2	Acetophenone	1	ND		10.0	
53-96-3	2-Acetylaminofluorene	1	ND		10.0	
92-67-1	4-Aminobiphenyl	1	ND		10.0	
62-53-3	Aniline (Benzeneamine)	1	ND		10.0	
120-12-7	Anthracene	1	ND		10.0	
140-57-8	Aramite	1	ND		10.0	
56-55-3	Benzo(a)anthracene	1	ND		10.0	
205-99-2	Benzo(b)fluoranthene	1	ND		10.0	
207-08-09	Benzo(k)fluoranthene	1	ND		10.0	
191-24-2	Benzo(g,h,i)perylene	1	ND		10.0	
50-32-8	Benzo(a)pyrene	1	ND		10.0	
100-51-6	Benzyl alcohol	1	ND		10.0	
101-55-3	4-Bromophenyl phenyl ether	1	ND		10.0	
85-68-7	Butylbenzylphthalate	1	ND		10.0	
88-85-7	2-sec-Butyl-4-6-dinitrophenol (Dinoseb)	1	ND		10.0	
106-47-8	4-Chloroaniline (p-Chloroaniline)	1	ND		10.0	
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	
108-60-1	bis(2-Chloroisopropyl) ether	1	ND		10.0	
59-50-7	4-Chloro-3-methylphenol (p-Chloro-m-cresol)	1	ND		10.0	
91-58-7	2-Chloronaphthalene	1	ND		10.0	
95-57-8	2-Chlorophenol (o-Chlorophenol)	1	ND		10.0	
7005-72-3	4-Chlorophenyl phenyl ether	1	ND		10.0	
218-01-9	Chrysene	1	ND		10.0	
53-70-3	Dibenz(a,h)anthracene	1	ND		10.0	
132-64-9	Dibenzofuran	1	ND		10.0	
84-74-2	Di-n-butylphthalate	1	ND		10.0	
95-50-1	1,2-Dichlorobenzene (o-Dichlorobenzene)	1	ND		10.0	
541-73-1	1,3-Dichlorobenzene (m-Dichlorobenzene)	1	ND		10.0	
106-46-7	1,4-Dichlorobenzene (p-Dichlorobenzene)	1	ND		10.0	
91-94-1	3,3'-Dichlorobenzidine	1	ND		20.0	
120-83-2	2,4-Dichlorophenol	1	ND		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.
 Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:50:50

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans
Single Sample - Protocol

Client ID: TAC-SWMU2-GW-01-02

Project: 1Q/99 GW SAMPLING

Lab ID: OHN-002

Description: None

Method: SW 8270 Appendix IX Semivolatile Organics

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Episode: OHN

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 29335

Units: ug/l

Target List: 8270AP9WAT

Prep Factor: 1.00

Leached: n/a

Prepared: 11-Feb-99

Analyzed: 23-Feb-99 22:40 JA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
87-65-0	2,6-Dichlorophenol	1	ND		10.0	
84-66-2	Diethylphthalate	1	ND		10.0	
60-11-7	p-(Dimethylamino)azobenzene	1	ND		10.0	
57-97-6	7,12-Dimethylbenz(a)anthracene	1	ND		10.0	
119-93-7	3,3'-Dimethylbenzidine	1	ND		10.0	
122-09-8	alpha, alpha- Dimethylphenethylamine	1	ND		10.0	
105-67-9	2,4-Dimethylphenol	1	ND		10.0	
131-11-3	Dimethylphthalate	1	ND		10.0	
99-65-0	1,3-Dinitrobenzene (m-Dinitrobenzene)	1	ND		10.0	
534-52-1	4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	1	ND		25.0	
51-28-5	2,4-Dinitrophenol	1	ND		25.0	
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	
117-84-0	Di-n-octylphthalate	1	ND		10.0	
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	
97-63-2	Ethyl methacrylate (2-Propenoic acid)	1	ND		10.0	
62-50-0	Ethyl methanesulfonate	1	ND		10.0	
206-44-0	Fluoranthene	1	ND		10.0	
86-73-7	Fluorene	1	ND		10.0	
118-74-1	Hexachlorobenzene	1	ND		10.0	
87-68-3	Hexachlorobutadiene	1	ND		10.0	
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	
67-72-1	Hexachloroethane	1	ND		10.0	
70-30-4	Hexachlorophene	1	ND		10.0	
1888-71-7	Hexachloropropene	1	ND		10.0	
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		10.0	
78-59-1	Isophorone	1	ND		10.0	
120-58-1	Isosafrole	1	ND		10.0	
91-80-5	Methapyrilene	1	ND		10.0	
56-49-5	3-Methylcholanthrene	1	ND		10.0	
80-62-6	Methyl methacrylate	1	ND		10.0	
66-27-3	Methyl methanesulfonate	1	ND		10.0	
91-57-6	2-Methylnaphthalene	1	ND		10.0	
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:50:55

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-01-02

Project: 1Q/99 GW SAMPLING

Lab ID: QHN-002

Description: None

Method: SW 8270 Appendix IX Semivolatile Organics

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Episode: QHN

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 29335

Units: ug/l

Target List: 8270AP9WAT

Prep Factor: 1.00

Leached: n/a

Prepared: 11-Feb-99

Analyzed: 23-Feb-99 22:40 JA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
108-39-4	3-Methylphenol (m-Cresol)	1	ND	A7	10.0	
106-44-5	4-Methylphenol (p-Cresol)	1	ND		10.0	
91-20-3	Naphthalene	1	ND		10.0	
134-32-7	1-Naphthaleneamine (1-Naphthylamine)	1	ND		10.0	
91-59-8	2-Naphthaleneamine (2-Naphthylamine)	1	ND		10.0	
130-15-4	1,4-Naphthoquinone	1	ND		50.0	
88-74-4	2-Nitroaniline (o-Nitroaniline)	1	ND		25.0	
99-09-2	3-Nitroaniline (m-Nitroaniline)	1	ND		25.0	
100-01-6	4-Nitroaniline (p-Nitroaniline)	1	ND		25.0	
98-95-3	Nitrobenzene	1	ND		10.0	
88-75-5	2-Nitrophenol (o-Nitrophenol)	1	ND		10.0	
100-02-7	4-Nitrophenol (p-Nitrophenol)	1	ND		25.0	
56-57-2	4-Nitroquinoline-1-oxide	1	ND		10.0	
924-16-3	N-Nitrosodi-n-butylamine	1	ND		10.0	
55-18-5	N-Nitrosodiethylamine	1	ND		10.0	
62-75-9	N-Nitrosodimethylamine	1	ND		10.0	
86-30-6	N-Nitrosodiphenylamine (Diphenylamine)	1	ND	A10	10.0	
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	
10595-95-6	N-Nitrosomethylamine	1	ND		10.0	
59-89-2	N-Nitrosomorpholine	1	ND		10.0	
100-75-4	N-Nitrosopiperidine	1	ND		10.0	
930-55-2	N-Nitrosopyrrolidine	1	ND		10.0	
99-55-8	5-Nitro-o-toluidine	1	ND		10.0	
608-93-5	Pentachlorobenzene	1	ND		10.0	
76-01-7	Pentachloroethane	1	ND		10.0	
82-68-8	Pentachloronitrobenzene	1	ND		10.0	
87-86-5	Pentachlorophenol	1	ND		25.0	
62-44-2	Phenacetin	1	ND		10.0	
85-01-8	Phenanthrene	1	ND		10.0	
108-95-2	Phenol	1	ND		10.0	
106-50-3	p-Phenylenediamine	1	ND		10.0	
109-06-08	2-Picoline (2-Methylpyridine)	1	ND		10.0	
23950-58-5	Pronamide	1	ND		10.0	
129-00-0	Pyrene	1	ND		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:50:58

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans
Single Sample - Protocol

Client ID: TAC-SWMU2-GW-01-02

Project: 1Q/99 GW SAMPLING

Lab ID: QHN-002

Description: None

Method: SW 8270 Appendix IX Semivolatile Organics

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Episode: QHN

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Factor: 1.00

Leached: n/a

Prep Level: Water

Batch: 29335

Units: ug/l

Target List: 8270AP9WAT

Prepared: 11-Feb-99

Analyzed: 23-Feb-99 22:40 JA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
110-86-1	Pyridine	1	ND		10.0	
94-59-7	Safrole	1	ND		10.0	
95-94-3	1,2,4,5-Tetrachlorobenzene	1	ND		10.0	
58-90-2	2,3,4,6-Tetrachlorophenol	1	ND		10.0	
95-53-4	o-Toluidine	1	ND		10.0	
120-82-1	1,2,4-Trichlorobenzene	1	ND		10.0	
95-95-4	2,4,5-Trichlorophenol	1	ND		10.0	
88-06-2	2,4,6-Trichlorophenol	1	ND		25.0	
99-35-4	1,3,5-Trinitrobenzene (sym-Trinitrobenzene)	1	ND		10.0	

111 compound(s) reported

Revision 1

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans
Single Sample - Protocol

Client ID: TAC-SWMU2-GW-02-02

Project: 1Q/99 GW SAMPLING

Lab ID: OHN-003

Description: None

Method: SW 8260 Appendix IX Volatile Organics

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Episode: OHN **Sample Qu:** D1 D6

Matrix: Water **% Moisture:** n/a

Prep Level: Water **Batch:** 29306

Units: ug/l **Target List:** 8260AP9WAT

Prep Factor: 1.00

Leached: n/a

Prepared:

Analyzed: 13-Feb-99 4:31 KC

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
67-64-1	Acetone (2-Propanone, Dimethyl ketone)	10	ND		100	
75-05-8	Acetonitrile (Methyl cyanide)	10	ND		500	
107-02-8	Acrolein (2-Propenal)	10	ND		100	
107-13-1	Acrylonitrile (2-Propenenitrile)	10	ND		100	
107-05-1	Allyl chloride (3-Chloropropene)	10	ND		50.0	
71-43-2	Benzene	10	ND		50.0	
75-27-4	Bromodichloromethane	10	ND		50.0	
75-25-2	Bromoform	10	ND		50.0	
74-83-9	Bromomethane (Methyl bromide)	10	ND		100	
78-93-3	2-Butanone (Methyl ethyl ketone)	10	ND		100	
75-15-0	Carbon disulfide	10	ND		50.0	
56-23-5	Carbon tetrachloride	10	ND		50.0	
108-90-7	Chlorobenzene	10	ND		50.0	
75-00-3	Chloroethane	10	ND		100	
67-66-3	Chloroform	10	ND		50.0	
74-87-3	Chloromethane (Methyl chloride)	10	ND		100	
126-99-8	Chloroprene (2-Chloro-1,3-butadiene)	10	ND		500	
124-48-1	Dibromochloromethane	10	ND		50.0	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	10	ND		50.0	
106-93-4	1,2-Dibromoethane (Ethylene dibromide)	10	ND		50.0	
74-95-3	Dibromomethane (Methylene bromide)	10	ND		50.0	
110-57-6	trans-1,4-Dichloro-2-butene	10	ND		50.0	
75-71-8	Dichlorodifluoromethane (Freon 12)	10	ND		500	
75-34-3	1,1-Dichloroethane	10	ND		50.0	
107-06-2	1,2-Dichloroethane (Ethylene dichloride)	10	ND		50.0	
75-35-4	1,1-Dichloroethene (Dichloroethylene)	10	15.7	J	50.0	
156-60-5	trans-1,2-Dichloroethene	10	ND		50.0	
78-87-5	1,2-Dichloropropane	10	ND		50.0	
10061-01-5	cis-1,3-Dichloropropene	10	ND		50.0	
10061-02-6	trans-1,3-Dichloropropene	10	ND		50.0	
123-91-1	1,4-Dioxane	10	ND		5000	
100-41-4	Ethylbenzene	10	ND		50.0	
591-78-6	2-Hexanone	10	ND		100	
74-88-4	Iodomethane (Methyl iodide)	10	ND		50.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size. Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:51:08

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans
Single Sample - Protocol

Client ID: TAC-SWMU2-GW-02-02

Project: 1Q/99 GW SAMPLING

Lab ID: QHN-003

Description: None

Method: SW 8260 Appendix IX Volatile Organics

Prep Factor: 1.00

Leached: n/a

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Episode: QHN

Sample Qu: D1 D6

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 29306

Units: ug/l

Target List: 8260AP9WAT

Analyzed: 13-Feb-99 4:31 KC

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
78-83-1	2-Methyl-1-propanol (iso-Butyl alcohol)	10	ND		5000	
126-98-7	Methacrylonitrile	10	ND		50.0	
75-09-2	Methylene chloride (Dichloromethane)	10	ND		50.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	ND		100	
107-12-0	Propionitrile (Ethyl cyanide)	10	ND		100	
100-42-4	Styrene	10	ND		50.0	
630-20-6	1,1,1,2-Tetrachloroethane	10	ND		50.0	
79-34-5	1,1,2,2-Tetrachloroethane	10	ND		50.0	
127-18-4	Tetrachloroethene (Perchloroethylene)	10	33.5	J	50.0	
108-88-3	Toluene	10	65.3		50.0	
71-55-6	1,1,1-Trichloroethane (Methyl chloroform)	10	ND		50.0	
79-00-5	1,1,2-Trichloroethane	10	ND		50.0	
79-01-6	Trichloroethene (Trichloroethylene)	100	11000	D1	500	
75-69-4	Trichlorofluoromethane (Freon 11)	10	ND		50.0	
96-18-4	1,2,3-Trichloropropane	10	ND		50.0	
108-05-4	Vinyl acetate	10	ND		100	
75-01-4	Vinyl chloride (Chloroethylene)	10	928		100	
1330-20-7	Xylene (total)	10	40.5	J	50.0	

52 compound(s) reported

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans
Single Sample - Protocol

Client ID: TAC-SWMU2-GW-02-02

Project: 1Q/99 GW SAMPLING

Lab ID: QHN-003

Description: None

Method: SW 8270 Appendix IX Semivolatile Organics

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Episode: QHN

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 29335

Units: ug/l

Target List: 8270AP9WAT

Prep Factor: 1.00

Leached: n/a

Prepared: 11-Feb-99

Analyzed: 23-Feb-99 23:27 JA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
83-32-9	Acenaphthene	1	ND		10.0	
208-96-8	Acenaphthylene	1	ND		10.0	
98-86-2	Acetophenone	1	ND		10.0	
53-96-3	2-Acetylaminofluorene	1	ND		10.0	
92-67-1	4-Aminobiphenyl	1	ND		10.0	
62-53-3	Aniline (Benzeneamine)	1	ND		10.0	
120-12-7	Anthracene	1	ND		10.0	
140-57-8	Aramite	1	ND		10.0	
56-55-3	Benzo(a)anthracene	1	ND		10.0	
205-99-2	Benzo(b)fluoranthene	1	ND		10.0	
207-08-09	Benzo(k)fluoranthene	1	ND		10.0	
191-24-2	Benzo(g,h,i)perylene	1	ND		10.0	
50-32-8	Benzo(a)pyrene	1	ND		10.0	
100-51-6	Benzyl alcohol	1	ND		10.0	
101-55-3	4-Bromophenyl phenyl ether	1	ND		10.0	
85-68-7	Butylbenzylphthalate	1	ND		10.0	
88-85-7	2-sec-Butyl-4-6-dinitrophenol (Dinoseb)	1	ND		10.0	
106-47-8	4-Chloroaniline (p-Chloroaniline)	1	ND		10.0	
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	
108-60-1	bis(2-Chloroisopropyl) ether	1	ND		10.0	
59-50-7	4-Chloro-3-methylphenol (p-Chloro-m-cresol)	1	ND		10.0	
91-58-7	2-Chloronaphthalene	1	ND		10.0	
95-57-8	2-Chlorophenol (o-Chlorophenol)	1	ND		10.0	
7005-72-3	4-Chlorophenyl phenyl ether	1	ND		10.0	
218-01-9	Chrysene	1	ND		10.0	
53-70-3	Dibenz(a,h)anthracene	1	ND		10.0	
132-64-9	Dibenzo-furan	1	ND		10.0	
84-74-2	Di-n-butylphthalate	1	ND		10.0	
95-50-1	1,2-Dichlorobenzene (o-Dichlorobenzene)	1	ND		10.0	
541-73-1	1,3-Dichlorobenzene (m-Dichlorobenzene)	1	ND		10.0	
106-46-7	1,4-Dichlorobenzene (p-Dichlorobenzene)	1	ND		10.0	
91-94-1	3,3'-Dichlorobenzidine	1	ND		20.0	
120-83-2	2,4-Dichlorophenol	1	ND		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:51:15

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans
Single Sample - Protocol

Client ID: TAC-SWMU2-GW-02-02

Project: 1Q/99 GW SAMPLING

Lab ID: QHN-003

Description: None

Method: SW 8270 Appendix IX Semivolatile Organics

Prep Factor: 1.00

Leached: n/a

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Episode: QHN

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 29335

Units: ug/l

Target List: 8270AP9WAT

Prepared: 11-Feb-99

Analyzed: 23-Feb-99 23:27 JA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
87-65-0	2,6-Dichlorophenol	1	ND		10.0	
84-66-2	Diethylphthalate	1	ND		10.0	
60-11-7	p-(Dimethylamino)azobenzene	1	ND		10.0	
57-97-6	7,12-Dimethylbenz(a)anthracene	1	ND		10.0	
119-93-7	3,3'-Dimethylbenzidine	1	ND		10.0	
122-09-8	alpha, alpha- Dimethylphenethylamine	1	ND		10.0	
105-67-9	2,4-Dimethylphenol	1	ND		10.0	
131-11-3	Dimethylphthalate	1	ND		10.0	
99-65-0	1,3-Dinitrobenzene (m-Dinitrobenzene)	1	ND		10.0	
534-52-1	4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	1	ND		25.0	
51-28-5	2,4-Dinitrophenol	1	ND		25.0	
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	
117-84-0	Di-n-octylphthalate	1	ND		10.0	
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	
97-63-2	Ethyl methacrylate (2-Propenoic acid)	1	ND		10.0	
62-50-0	Ethyl methanesulfonate	1	ND		10.0	
206-44-0	Fluoranthene	1	ND		10.0	
86-73-7	Fluorene	1	ND		10.0	
118-74-1	Hexachlorobenzene	1	ND		10.0	
87-68-3	Hexachlorobutadiene	1	ND		10.0	
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	
67-72-1	Hexachloroethane	1	ND		10.0	
70-30-4	Hexachlorophene	1	ND		10.0	
1888-71-7	Hexachloropropene	1	ND		10.0	
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		10.0	
78-59-1	Isophorone	1	ND		10.0	
120-58-1	Isosafrole	1	ND		10.0	
91-80-5	Methapyrilene	1	ND		10.0	
56-49-5	3-Methylcholanthrene	1	ND		10.0	
80-62-6	Methyl methacrylate	1	ND		10.0	
66-27-3	Methyl methanesulfonate	1	ND		10.0	
91-57-6	2-Methylnaphthalene	1	2.81 J		10.0	
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:51:19

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans
Single Sample - Protocol

Client ID: TAC-SWMU2-GW-02-02

Project: 1Q/99 GW SAMPLING

Lab ID: QHN-003

Description: None

Method: SW 8270 Appendix IX Semivolatile Organics

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Episode: QHN

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 29335

Units: ug/l

Target List: 8270AP9WAT

Prep Factor: 1.00

Leached: n/a

Prepared: 11-Feb-99

Analyzed: 23-Feb-99 23:27 JA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
108-39-4	3-Methylphenol (m-Cresol)	1	ND	A7	10.0	
106-44-5	4-Methylphenol (p-Cresol)	1	ND		10.0	
91-20-3	Naphthalene	1	ND		10.0	
134-32-7	1-Naphthaleneamine (1-Naphthylamine)	1	ND		10.0	
91-59-8	2-Naphthaleneamine (2-Naphthylamine)	1	ND		10.0	
130-15-4	1,4-Naphthoquinone	1	ND		50.0	
88-74-4	2-Nitroaniline (o-Nitroaniline)	1	ND		25.0	
99-09-2	3-Nitroaniline (m-Nitroaniline)	1	ND		25.0	
100-01-6	4-Nitroaniline (p-Nitroaniline)	1	ND		25.0	
98-95-3	Nitrobenzene	1	ND		10.0	
88-75-5	2-Nitrophenol (o-Nitrophenol)	1	ND		10.0	
100-02-7	4-Nitrophenol (p-Nitrophenol)	1	ND		25.0	
56-57-2	4-Nitroquinoline-1-oxide	1	ND		10.0	
924-16-3	N-Nitrosodi-n-butylamine	1	ND		10.0	
55-18-5	N-Nitrosodiethylamine	1	ND		10.0	
62-75-9	N-Nitrosodimethylamine	1	ND		10.0	
86-30-6	N-Nitrosodiphenylamine (Diphenylamine)	1	ND	A10	10.0	
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	
10595-95-6	N-Nitrosomethylamine	1	ND		10.0	
59-89-2	N-Nitrosomorpholine	1	ND		10.0	
100-75-4	N-Nitrosopiperidine	1	ND		10.0	
930-55-2	N-Nitrosopyrrolidine	1	ND		10.0	
99-55-8	5-Nitro-o-toluidine	1	ND		10.0	
608-93-5	Pentachlorobenzene	1	ND		10.0	
76-01-7	Pentachloroethane	1	ND		10.0	
82-68-8	Pentachloronitrobenzene	1	ND		10.0	
87-86-5	Pentachlorophenol	1	5.25	J	25.0	
62-44-2	Phenacetin	1	ND		10.0	
85-01-8	Phenanthrene	1	ND		10.0	
108-95-2	Phenol	1	ND		10.0	
106-50-3	p-Phenylenediamine	1	ND		10.0	
109-06-08	2-Picoline (2-Methylpyridine)	1	ND		10.0	
23950-58-5	Pronamide	1	ND		10.0	
129-00-0	Pyrene	1	ND		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:51:23

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans
Single Sample - Protocol

Client ID: TAC-SWMU2-GW-02-02

Project: 1Q/99 GW SAMPLING

Lab ID: QHN-003

Description: None

Method: SW 8270 Appendix IX Semivolatile Organics

Prep Factor: 1.00

Leached: n/a

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Episode: QHN

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 29335

Units: ug/l

Target List: 8270AP9WAT

Prepared: 11-Feb-99

Analyzed: 23-Feb-99 23:27 JA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
110-86-1	Pyridine	1	ND		10.0	
94-59-7	Safrole	1	ND		10.0	
95-94-3	1,2,4,5-Tetrachlorobenzene	1	ND		10.0	
58-90-2	2,3,4,6-Tetrachlorophenol	1	ND		10.0	
95-53-4	o-Toluidine	1	ND		10.0	
120-82-1	1,2,4-Trichlorobenzene	1	13.2		10.0	
95-95-4	2,4,5-Trichlorophenol	1	ND		25.0	
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	
99-35-4	1,3,5-Trinitrobenzene (sym-Trinitrobenzene)	1	ND		10.0	

111 compound(s) reported
 Revision 1

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans
Single Sample - Protocol

Client ID: TAC-SWMU2-GW-02-02D

Project: 1Q/99 GW SAMPLING

Lab ID: QHN-004

Description: None

Method: SW 8260 Appendix IX Volatile Organics

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Episode: QHN

Sample Qu: D1 D6

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 29306

Units: ug/l

Target List: 8260AP9WAT

Prep Factor: 1.00

Leached: n/a

Prepared:

Analyzed: 13-Feb-99 5:30 KC

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
67-64-1	Acetone (2-Propanone, Dimethyl ketone)	10	ND		100	
75-05-8	Acetonitrile (Methyl cyanide)	10	ND		500	
107-02-8	Acrolein (2-Propenal)	10	ND		100	
107-13-1	Acrylonitrile (2-Propenenitrile)	10	ND		100	
107-05-1	Allyl chloride (3-Chloropropene)	10	ND		50.0	
71-43-2	Benzene	10	ND		50.0	
75-27-4	Bromodichloromethane	10	ND		50.0	
75-25-2	Bromoform	10	ND		50.0	
74-83-9	Bromomethane (Methyl bromide)	10	ND		100	
78-93-3	2-Butanone (Methyl ethyl ketone)	10	ND		100	
75-15-0	Carbon disulfide	10	ND		50.0	
56-23-5	Carbon tetrachloride	10	ND		50.0	
108-90-7	Chlorobenzene	10	ND		50.0	
75-00-3	Chloroethane	10	ND		100	
67-66-3	Chloroform	10	ND		50.0	
74-87-3	Chloromethane (Methyl chloride)	10	ND		100	
126-99-8	Chloroprene (2-Chloro-1,3-butadiene)	10	ND		500	
124-48-1	Dibromochloromethane	10	ND		50.0	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	10	ND		50.0	
106-93-4	1,2-Dibromoethane (Ethylene dibromide)	10	ND		50.0	
74-95-3	Dibromomethane (Methylene bromide)	10	ND		50.0	
110-57-6	trans-1,4-Dichloro-2-butene	10	ND		50.0	
75-71-8	Dichlorodifluoromethane (Freon 12)	10	ND		500	
75-34-3	1,1-Dichloroethane	10	ND		50.0	
107-06-2	1,2-Dichloroethane (Ethylene dichloride)	10	ND		50.0	
75-35-4	1,1-Dichloroethene (Dichloroethylene)	10	ND		50.0	
156-60-5	trans-1,2-Dichloroethene	10	14.7	J	50.0	
78-87-5	1,2-Dichloropropane	10	ND		50.0	
10061-01-5	cis-1,3-Dichloropropene	10	ND		50.0	
10061-02-6	trans-1,3-Dichloropropene	10	ND		50.0	
123-91-1	1,4-Dioxane	10	ND		50.0	
100-41-4	Ethylbenzene	10	37.3	J	5000	
591-78-6	2-Hexanone	10	ND		50.0	
74-88-4	Iodomethane (Methyl iodide)	10	ND		100	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:51:34

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans
Single Sample - Protocol

Client ID: TAC-SWMU2-GW-02-02D

Project: 1Q/99 GW SAMPLING

Lab ID: QHN-004

Description: None

Method: SW 8260 Appendix IX Volatile Organics

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Episode: QHN

Sample Qu: D1 D6

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 29306

Units: ug/l

Target List: 8260AP9WAT

Prep Factor: 1.00

Leached: n/a

Prepared:

Analyzed: 13-Feb-99 5:30 KC

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
78-83-1	2-Methyl-1-propanol (iso-Butyl alcohol)	10	ND		5000	
126-98-7	Methacrylonitrile	10	ND		50.0	
75-09-2	Methylene chloride (Dichloromethane)	10	ND		50.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	10	ND		100	
107-12-0	Propionitrile (Ethyl cyanide)	10	ND		100	
100-42-4	Styrene	10	ND		50.0	
630-20-6	1,1,1,2-Tetrachloroethane	10	ND		50.0	
79-34-5	1,1,2,2-Tetrachloroethane	10	ND		50.0	
127-18-4	Tetrachloroethene (Perchloroethylene)	10	33.6	J	50.0	
108-88-3	Toluene	10	63.7		50.0	
71-55-6	1,1,1-Trichloroethane (Methyl chloroform)	10	ND		50.0	
79-00-5	1,1,2-Trichloroethane	10	ND		50.0	
79-01-6	Trichloroethene (Trichloroethylene)	100	10600	DI	500	
75-69-4	Trichlorofluoromethane (Freon 11)	10	ND		50.0	
96-18-4	1,2,3-Trichloropropane	10	ND		50.0	
108-05-4	Vinyl acetate	10	ND		100	
75-01-4	Vinyl chloride (Chloroethylene)	10	876		100	
1330-20-7	Xylene (total)	10	41.7	J	50.0	

52 compound(s) reported

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans
Single Sample - Protocol

Client ID: TAC-SWMU2-GW-02-02D

Project: 1Q/99 GW SAMPLING

Lab ID: QHN-004

Description: None

Method: SW 8270 Appendix IX Semivolatile Organics

Prep Factor: 1.00

Leached: n/a

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Episode: QHN

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 29335

Units: ug/l

Target List: 8270AP9WAT

Prepared: 11-Feb-99

Analyzed: 23-Feb-99 21:06 JA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
83-32-9	Acenaphthene	1	ND		10.0	
208-96-8	Acenaphthylene	1	ND		10.0	
98-86-2	Acetophenone	1	ND		10.0	
53-96-3	2-Acetylaminofluorene	1	ND		10.0	
92-67-1	4-Aminobiphenyl	1	ND		10.0	
62-53-3	Aniline (Benzeneamine)	1	ND		10.0	
120-12-7	Anthracene	1	ND		10.0	
140-57-8	Aramite	1	ND		10.0	
56-55-3	Benzo(a)anthracene	1	ND		10.0	
205-99-2	Benzo(b)fluoranthene	1	ND		10.0	
207-08-09	Benzo(k)fluoranthene	1	ND		10.0	
191-24-2	Benzo(g,h,i)perylene	1	ND		10.0	
50-32-8	Benzo(a)pyrene	1	ND		10.0	
100-51-6	Benzyl alcohol	1	ND		10.0	
101-55-3	4-Bromophenyl phenyl ether	1	ND		10.0	
85-68-7	Butylbenzylphthalate	1	ND		10.0	
88-85-7	2-sec-Butyl-4,6-dinitrophenol (Dinoseb)	1	ND		10.0	
106-47-8	4-Chloroaniline (p-Chloroaniline)	1	ND		10.0	
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	
108-60-1	bis(2-Chloroisopropyl) ether	1	ND		10.0	
59-50-7	4-Chloro-3-methylphenol (p-Chloro-m-cresol)	1	ND		10.0	
91-58-7	2-Chloronaphthalene	1	ND		10.0	
95-57-8	2-Chlorophenol (o-Chlorophenol)	1	ND		10.0	
7005-72-3	4-Chlorophenyl phenyl ether	1	ND		10.0	
218-01-9	Chrysene	1	ND		10.0	
53-70-3	Dibenz(a,h)anthracene	1	ND		10.0	
132-64-9	Dibenzofuran	1	ND		10.0	
84-74-2	Di-n-butylphthalate	1	ND		10.0	
95-50-1	1,2-Dichlorobenzene (o-Dichlorobenzene)	1	ND		10.0	
541-73-1	1,3-Dichlorobenzene (m-Dichlorobenzene)	1	ND		10.0	
106-46-7	1,4-Dichlorobenzene (p-Dichlorobenzene)	1	ND		10.0	
91-94-1	3,3'-Dichlorobenzidine	1	ND		20.0	
120-83-2	2,4-Dichloropheno	1	ND		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

RL denotes Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Q denotes qualifiers. Specific qualifiers are defined at the end of the report.

NA denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:51:42

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans
Single Sample - Protocol

Client ID: TAC-SWMU2-GW-02-02D

Project: 1Q/99 GW SAMPLING

Lab ID: QHN-004

Description: None

Method: SW 8270 Appendix IX Semivolatile Organics

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Episode: QHN

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 29335

Units: ug/l

Target List: 8270AP9WAT

Prep Factor: 1.00

Leached: n/a

Prepared: 11-Feb-99

Analyzed: 23-Feb-99 21:06 JA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
87-65-0	2,6-Dichlorophenol	1	ND		10.0	
84-66-2	Diethylphthalate	1	ND		10.0	
60-11-7	p-(Dimethylamino)azobenzene	1	ND		10.0	
57-97-6	7,12-Dimethylbenz(a)anthracene	1	ND		10.0	
119-93-7	3,3'-Dimethylbenzidine	1	ND		10.0	
122-09-8	alpha, alpha- Dimethylphenethylamine	1	ND		10.0	
105-67-9	2,4-Dimethylphenol	1	ND		10.0	
131-11-3	Dimethylphthalate	1	ND		10.0	
99-65-0	1,3-Dinitrobenzene (m-Dinitrobenzene)	1	ND		10.0	
534-52-1	4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	1	ND		25.0	
51-28-5	2,4-Dinitrophenol	1	ND		25.0	
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	
117-84-0	Di-n-octylphthalate	1	ND		10.0	
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	
97-63-2	Ethyl methacrylate (2-Propenoic acid)	1	ND		10.0	
62-50-0	Ethyl methanesulfonate	1	ND		10.0	
206-44-0	Fluoranthene	1	ND		10.0	
86-73-7	Fluorene	1	ND		10.0	
118-74-1	Hexachlorobenzene	1	ND		10.0	
87-68-3	Hexachlorobutadiene	1	ND		10.0	
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	
67-72-1	Hexachloroethane	1	ND		10.0	
70-30-4	Hexachlorophene	1	ND		10.0	
1888-71-7	Hexachloropropene	1	ND		10.0	
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		10.0	
78-59-1	Isophorone	1	ND		10.0	
120-58-1	Isosafrole	1	ND		10.0	
91-80-5	Methapyrilene	1	ND		10.0	
56-49-5	3-Methylcholanthrene	1	ND		10.0	
80-62-6	Methyl methacrylate	1	ND		10.0	
66-27-3	Methyl methanesulfonate	1	ND		10.0	
91-57-6	2-Methylnaphthalene	1	3.35 J		10.0	
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

J denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

J lists qualifiers. Specific qualifiers are defined at the end of the report.

Moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:51:47

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-02-02D

Project: 1Q/99 GW SAMPLING

Lab ID: OHN-004

Description: None

Method: SW 8270 Appendix IX Semivolatile Organics

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Episode: OHN

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 29335

Units: ug/l

Target List: 8270AP9WAT

Prep Factor: 1.00

Leached: n/a

Prepared: 11-Feb-99

Analyzed: 23-Feb-99 21:06 JA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
108-39-4	3-Methylphenol (m-Cresol)	1	ND	A7	10.0	
106-44-5	4-Methylphenol (p-Cresol)	1	ND		10.0	
91-20-3	Naphthalene	1	ND		10.0	
134-32-7	1-Naphthaleneamine (1-Naphthylamine)	1	ND		10.0	
91-59-8	2-Naphthaleneamine (2-Naphthylamine)	1	ND		10.0	
130-15-4	1,4-Naphthoquinone	1	ND		50.0	
88-74-4	2-Nitroaniline (o-Nitroaniline)	1	ND		25.0	
99-09-2	3-Nitroaniline (m-Nitroaniline)	1	ND		25.0	
100-01-6	4-Nitroaniline (p-Nitroaniline)	1	ND		25.0	
98-95-3	Nitrobenzene	1	ND		10.0	
88-75-5	2-Nitrophenol (o-Nitrophenol)	1	ND		10.0	
100-02-7	4-Nitrophenol (p-Nitrophenol)	1	ND		25.0	
56-57-2	4-Nitroquinoline-1-oxide	1	ND		10.0	
924-16-3	N-Nitrosodi-n-butylamine	1	ND		10.0	
55-18-5	N-Nitrosodiethylamine	1	ND		10.0	
62-75-9	N-Nitrosodimethylamine	1	ND		10.0	
86-30-6	N-Nitrosodiphenylamine (Diphenylamine)	1	ND	A10	10.0	
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	
10595-95-6	N-Nitrosomethylethylamine	1	ND		10.0	
59-89-2	N-Nitrosomorpholine	1	ND		10.0	
100-75-4	N-Nitrosopiperidine	1	ND		10.0	
930-55-2	N-Nitrosopyrrolidine	1	ND		10.0	
99-55-8	5-Nitro-o-toluidine	1	ND		10.0	
608-93-5	Pentachlorobenzene	1	ND		10.0	
76-01-7	Pentachloroethane	1	ND		10.0	
82-68-8	Pentachloronitrobenzene	1	ND		10.0	
87-86-5	Pentachlorophenol	1	4.52	J	25.0	
62-44-2	Phenacetin	1	ND		10.0	
85-01-8	Phenanthrene	1	ND		10.0	
108-95-2	Phenol	1	ND		10.0	
106-50-3	p-Phenylenediamine	1	ND		10.0	
109-06-08	2-Picoline (2-Methylpyridine)	1	ND		10.0	
23950-58-5	Pronamide	1	ND		10.0	
129-00-0	Pyrene	1	ND		10.0	

D denotes Not Detected at or above the adjusted reporting limit.

F denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

eporting Limit is corrected for sample size, dilution and moisture content if applicable.

u lists qualifiers. Specific qualifiers are defined at the end of the report.

or moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:51:50

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans
Single Sample - Protocol

Client ID: TAC-SWMU2-GW-02-02D

Project: 1Q/99 GW SAMPLING

Lab ID: QHN-004

Description: None

Method: SW 8270 Appendix IX Semivolatile Organics

Prep Factor: 1.00

Leached: n/a

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Episode: QHN

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 29335

Units: ug/l

Target List: 8270AP9WAT

Prepared: 11-Feb-99

Analyzed: 23-Feb-99 21:06 JA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
110-86-1	Pyridine	1	ND		10.0	
94-59-7	Safrole	1	ND		10.0	
95-94-3	1,2,4,5-Tetrachlorobenzene	1	ND		10.0	
58-90-2	2,3,4,6-Tetrachlorophenol	1	ND		10.0	
95-53-4	o-Toluidine	1	ND		10.0	
120-82-1	1,2,4-Trichlorobenzene	1	17.5		10.0	
95-95-4	2,4,5-Trichlorophenol	1	ND		25.0	
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	
99-35-4	1,3,5-Trinitrobenzene (sym-Trinitrobenzene)	1	ND		10.0	

111 compound(s) reported

Revision 1

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:51:55

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans
Single Sample - Protocol

Client ID: TAC-SWMU2-GW-MS-02

Project: 1Q/99 GW SAMPLING

Lab ID: QHN-005MS

Description: MATRIX SPIKE

Method: SW 8260 Appendix IX Volatile Organics

Prep Factor: 1.00

Leached: n/a

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Episode: QHN

Sample Qu: D6

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 29306

Units: ug/l

Target List: 8260AP9WAT

Prepared:

Analyzed: 13-Feb-99 20:01 KC

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
67-64-1	Acetone (2-Propanone, Dimethyl ketone)	100	3290		1000	
75-05-8	Acetonitrile (Methyl cyanide)	100	ND		5000	
107-02-8	Acrolein (2-Propenal)	100	10300		1000	
107-13-1	Acrylonitrile (2-Propenenitrile)	100	6610		1000	
107-05-1	Allyl chloride (3-Chloropropene)	100	ND		500	
71-43-2	Benzene	100	4800		500	
75-27-4	Bromodichloromethane	100	4560		500	
75-25-2	Bromoform	100	4700		500	
74-83-9	Bromomethane (Methyl bromide)	100	4590		1000	
78-93-3	2-Butanone (Methyl ethyl ketone)	100	3860		1000	
75-15-0	Carbon disulfide	100	3790		500	
56-23-5	Carbon tetrachloride	100	5090		500	
108-90-7	Chlorobenzene	100	4770		500	
75-00-3	Chloroethane	100	4600		1000	
67-66-3	Chloroform	100	4260		500	
74-87-3	Chloromethane (Methyl chloride)	100	4950		1000	
126-99-8	Chloroprene (2-Chloro-1,3-butadiene)	100	ND		5000	
124-48-1	Dibromochloromethane	100	4800		500	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	100	4270		500	
106-93-4	1,2-Dibromoethane (Ethylene dibromide)	100	4460		500	
74-95-3	Dibromomethane (Methylene bromide)	100	4420		500	
110-57-6	trans-1,4-Dichloro-2-butene	100	ND		500	
75-71-8	Dichlorodifluoromethane (Freon 12)	100	ND		5000	
75-34-3	1,1-Dichloroethane	100	4180		500	
107-06-2	1,2-Dichloroethane (Ethylene dichloride)	100	4570		500	
75-35-4	1,1-Dichloroethene (Dichloroethylene)	100	4160		500	
156-60-5	trans-1,2-Dichloroethene	100	4250		500	
78-87-5	1,2-Dichloropropane	100	4700		500	
10061-01-5	cis-1,3-Dichloropropene	100	4620		500	
10061-02-6	trans-1,3-Dichloropropene	100	4450		500	
123-91-1	1,4-Dioxane	100	ND		50000	
100-41-4	Ethylbenzene	100	4590		500	
591-78-6	2-Hexanone	100	4440		1000	
74-88-4	Iodomethane (Methyl iodide)	100	4460		500	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:52:00

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-MS-02

Project: 1Q/99 GW SAMPLING

Lab ID: OHN-005MS

Description: MATRIX SPIKE

Method: SW 8260 Appendix IX Volatile Organics

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Episode: OHN

Sample Qu: D6

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 29306

Units: ug/l

Target List: 8260AP9WAT

Prep Factor: 1.00

Leached: n/a

Prepared:

Analyzed: 13-Feb-99 20:01 KC

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
78-83-1	2-Methyl-1-propanol (iso-Butyl alcohol)	100	ND		50000	
126-98-7	Methacrylonitrile	100	ND		500	
75-09-2	Methylene chloride (Dichloromethane)	100	2890		500	
108-10-1	4-Methyl-2-pentanone (MIBK)	100	990	J	1000	
107-12-0	Propionitrile (Ethyl cyanide)	100	ND		1000	
100-42-4	Styrene	100	4770		500	
630-20-6	1,1,1,2-Tetrachloroethane	100	4830		500	
79-34-5	1,1,2,2-Tetrachloroethane	100	4270		500	
127-18-4	Tetrachloroethylene (Perchloroethylene)	100	4820		500	
108-88-3	Toluene	100	4720		500	
71-55-6	1,1,1-Trichloroethane (Methyl chloroform)	100	4870		500	
79-00-5	1,1,2-Trichloroethane	100	4440		500	
79-01-6	Trichloroethylene (Trichloroethylene)	100	16500		500	
75-69-4	Trichlorofluoromethane (Freon 11)	100	4530		500	
96-18-4	1,2,3-Trichloropropane	100	4450		500	
108-05-4	Vinyl acetate	100	3700		1000	
75-01-4	Vinyl chloride (Chloroethene)	100	5590		1000	
1330-20-7	Xylene (total)	100	14800		500	

52 compound(s) reported

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans
Single Sample - Protocol

Client ID: <u>TAC-SWMU2-GW-MS-02</u>	Client: <u>ECO-SYSTEMS, INCORPORATED/MS</u>
Project: <u>1Q/99 GW SAMPLING</u>	Site: <u>None</u>
Lab ID: <u>OHN-005MS</u>	Episode: <u>OHN</u> Sample Qu:
Description: <u>MATRIX SPIKE</u>	Matrix: <u>Water</u> % Moisture: <u>n/a</u>
Method: <u>SW 8270 Appendix IX Semivolatile Organics</u>	Prep Level: <u>Water</u> Batch: <u>29335</u>
Prep Factor: <u>1.00</u>	Units: <u>ug/l</u> Target List: <u>8270AP9WAT</u>
Leached: <u>n/a</u>	Prepared: <u>11-Feb-99</u> Analyzed: <u>24-Feb-99 11:39 JA</u>

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
83-32-9	Acenaphthene	1	28.3		10.0	
208-96-8	Acenaphthylene	1	26.6		10.0	
98-86-2	Acetophenone	1	ND		10.0	
53-96-3	2-Acetylaminofluorene	1	ND		10.0	
92-67-1	4-Aminobiphenyl	1	ND		10.0	
62-53-3	Aniline (Benzeneamine)	1	15.8		10.0	
120-12-7	Anthracene	1	26.3		10.0	
140-57-8	Aramite	1	ND		10.0	
56-55-3	Benzo(a)anthracene	1	34.0		10.0	
205-99-2	Benzo(b)fluoranthene	1	28.3		10.0	
207-08-09	Benzo(k)fluoranthene	1	26.2		10.0	
191-24-2	Benzo(g,h,i)perylene	1	29.5		10.0	
50-32-8	Benzo(a)pyrene	1	26.7		10.0	
100-51-6	Benzyl alcohol	1	32.1		10.0	
101-55-3	4-Bromophenyl phenyl ether	1	28.6		10.0	
85-68-7	Butylbenzylphthalate	1	37.9		10.0	
88-85-7	2-sec-Butyl-4-6-dinitrophenol (Dinoseb)	1	ND		10.0	
106-47-8	4-Chloroaniline (p-Chloroaniline)	1	12.2		10.0	
111-91-1	bis(2-Chloroethoxy)methane	1	29.2		10.0	
111-44-4	bis(2-Chloroethyl) ether	1	37.8		10.0	
108-60-1	bis(2-Chloroisopropyl) ether	1	38.1		10.0	
59-50-7	4-Chloro-3-methylphenol (p-Chloro-m-cresol)	1	29.2		10.0	
91-58-7	2-Chloronaphthalene	1	27.0		10.0	
95-57-8	2-Chlorophenol (o-Chlorophenol)	1	30.5		10.0	
7005-72-3	4-Chlorophenyl phenyl ether	1	27.0		10.0	
218-01-9	Chrysene	1	33.0		10.0	
53-70-3	Dibenz(a,h)anthracene	1	28.1		10.0	
132-64-9	Dibenzofuran	1	28.5		10.0	
84-74-2	Di-n-butylphthalate	1	32.7		10.0	
95-50-1	1,2-Dichlorobenzene (o-Dichlorobenzene)	1	24.6		10.0	
541-73-1	1,3-Dichlorobenzene (m-Dichlorobenzene)	1	25.8		10.0	
106-46-7	1,4-Dichlorobenzene (p-Dichlorobenzene)	1	25.0		10.0	
91-94-1	3,3'-Dichlorobenzidine	1	ND		20.0	
120-83-2	2,4-Dichlorophenol	1	30.6		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:52:08

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans
Single Sample - Protocol

Client ID: <u>TAC-SWMU2-GW-MS-02</u>	Client: <u>ECO-SYSTEMS, INCORPORATED/MS</u>		
Project: <u>1Q/99 GW SAMPLING</u>	Site: <u>None</u>		
Lab ID: <u>QHN-005MS</u>	Episode: <u>QHN</u>	Sample Qu:	
Description: <u>MATRIX SPIKE</u>	Matrix: <u>Water</u>	% Moisture: <u>n/a</u>	
Method: <u>SW 8270 Appendix IX Semivolatile Organics</u>	Prep Level: <u>Water</u>	Batch: <u>29335</u>	
Prep Factor: <u>1.00</u>	Leached: <u>n/a</u>	Units: <u>ug/l</u>	Target List: <u>8270AP9WAT</u>
		Prepared: <u>11-Feb-99</u>	Analyzed: <u>24-Feb-99</u> <u>11:39 JA</u>

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
87-65-0	2,6-Dichlorophenol	1	ND		10.0	
84-66-2	Diethylphthalate	1	28.4		10.0	
60-11-7	p-(Dimethylamino)azobenzene	1	ND		10.0	
57-97-6	7,12-Dimethylbenz(a)anthracene	1	ND		10.0	
119-93-7	3,3'-Dimethylbenzidine	1	ND		10.0	
122-09-8	alpha, alpha- Dimethylphenethylamine	1	ND		10.0	
105-67-9	2,4-Dimethylphenol	1	12.2		10.0	
131-11-3	Dimethylphthalate	1	29.8		10.0	
99-65-0	1,3-Dinitrobenzene (m-Dinitrobenzene)	1	ND		10.0	
534-52-1	4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	1	39.1		25.0	
51-28-5	2,4-Dinitrophenol	1	57.5		25.0	
121-14-2	2,4-Dinitrotoluene	1	32.8		10.0	
606-20-2	2,6-Dinitrotoluene	1	32.1		10.0	
117-84-0	Di-n-octylphthalate	1	30.9		10.0	
117-81-7	bis(2-Ethylhexyl)phthalate	1	42.1		10.0	
97-63-2	Ethyl methacrylate (2-Propenoic acid)	1	ND		10.0	
62-50-0	Ethyl methanesulfonate	1	ND		10.0	
206-44-0	Fluoranthene	1	30.3		10.0	
86-73-7	Fluorene	1	28.0		10.0	
118-74-1	Hexachlorobenzene	1	30.1		10.0	
87-68-3	Hexachlorobutadiene	1	27.7		10.0	
77-47-4	Hexachlorocyclopentadiene	1	14.0		10.0	
67-72-1	Hexachloroethane	1	27.1		10.0	
70-30-4	Hexachlorophene	1	ND		10.0	
1888-71-7	Hexachloropropene	1	ND		10.0	
193-39-5	Indeno(1,2,3-cd)pyrene	1	27.5		10.0	
78-59-1	Isophorone	1	34.8		10.0	
120-58-1	Isosafrole	1	ND		10.0	
91-80-5	Methacrylene	1	ND		10.0	
56-49-5	3-Methylcholanthrene	1	ND		10.0	
80-62-6	Methyl methacrylate	1	ND		10.0	
66-27-3	Methyl methanesulfonate	1	ND		10.0	
91-57-6	2-Methylnaphthalene	1	32.7		10.0	
95-48-7	2-Methylphenol (o-Cresol)	1	27.5		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.
 Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:52:12

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans
Single Sample - Protocol

Client ID: TAC-SWMU2-GW-MS-02

Project: 1Q/99 GW SAMPLING

Lab ID: QHN-005MS

Description: MATRIX SPIKE

Method: SW 8270 Appendix IX Semivolatile Organics

Prep Factor: 1.00

Leached: n/a

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Episode: QHN

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 29335

Units: ug/l

Target List: 8270AP9WAT

Prepared: 11-Feb-99

Analyzed: 24-Feb-99 11:39 JA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
108-39-4	3-Methylphenol (m-Cresol)	1	29.0	A7	10.0	
106-44-5	4-Methylphenol (p-Cresol)	1	29.0		10.0	
91-20-3	Naphthalene	1	29.3		10.0	
134-32-7	1-Naphthaleneamine (1-Naphthylamine)	1	ND		10.0	
91-59-8	2-Naphthaleneamine (2-Naphthylamine)	1	ND		10.0	
130-15-4	1,4-Naphthoquinone	1	ND		50.0	
88-74-4	2-Nitroaniline (o-Nitroaniline)	1	26.5		25.0	
99-09-2	3-Nitroaniline (m-Nitroaniline)	1	15.8	J	25.0	
100-01-6	4-Nitroaniline (p-Nitroaniline)	1	12.0	J	25.0	
98-95-3	Nitrobenzene	1	34.3		10.0	
88-75-5	2-Nitrophenol (o-Nitrophenol)	1	29.9		10.0	
100-02-7	4-Nitrophenol (p-Nitrophenol)	1	37.0		25.0	
56-57-2	4-Nitroquinoline-1-oxide	1	ND		10.0	
924-16-3	N-Nitrosodi-n-butylamine	1	ND		10.0	
55-18-5	N-Nitrosodiethylamine	1	ND		10.0	
62-75-9	N-Nitrosodimethylamine	1	31.9		10.0	
86-30-6	N-Nitrosodiphenylamine (Diphenylamine)	1	20.1	A10	10.0	
621-64-7	N-Nitroso-di-n-propylamine	1	32.4		10.0	
10595-95-6	N-Nitrosomethylalkylamine	1	ND		10.0	
59-89-2	N-Nitrosomorpholine	1	ND		10.0	
100-75-4	N-Nitrosopiperidine	1	ND		10.0	
930-55-2	N-Nitrosopyrrolidine	1	ND		10.0	
99-55-8	5-Nitro-o-toluidine	1	ND		10.0	
608-93-5	Pentachlorobenzene	1	ND		10.0	
76-01-7	Pentachloroethane	1	ND		10.0	
82-68-8	Pentachloronitrobenzene	1	ND		10.0	
87-86-5	Pentachlorophenol	1	44.1		25.0	
62-44-2	Phenacetin	1	ND		10.0	
85-01-8	Phenanthrene	1	28.2		10.0	
108-95-2	Phenol	1	33.7		10.0	
106-50-3	p-Phenylenediamine	1	ND		10.0	
109-06-08	2-Picoline (2-Methylpyridine)	1	ND		10.0	
23950-58-5	Pronamide	1	ND		10.0	
129-00-0	Pyrene	1	32.2		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:52:16

ATED/MS

35

0AP9WAT

eb-99 11:39 JA

Reg.
Limit

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans
Single Sample - Protocol

Client ID: <u>TAC-SWMU2-GW-MS-02</u>	Client: <u>ECO-SYSTEMS, INCORPORATED/MS</u>
Project: <u>1Q/99 GW SAMPLING</u>	Site: <u>None</u>
Lab ID: <u>QHN-005MS</u>	Episode: <u>QHN</u> Sample Qu:
Description: <u>MATRIX SPIKE</u>	Matrix: <u>Water</u> % Moisture: <u>n/a</u>
Method: <u>SW 8270 Appendix IX Semivolatile Organics</u>	Prep Level: <u>Water</u> Batch: <u>29335</u>
Prep Factor: <u>1.00</u>	Units: <u>ug/l</u> Target List: <u>8270AP9WAT</u>
Leached: <u>n/a</u>	Prepared: <u>11-Feb-99</u> Analyzed: <u>24-Feb-99 11:39 JA</u>

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
110-86-1	Pyridine	1	25.3		10.0	
94-59-7	Safrole	1	ND		10.0	
95-94-3	1,2,4,5-Tetrachlorobenzene	1	ND		10.0	
58-90-2	2,3,4,6-Tetrachlorophenol	1	ND		10.0	
95-53-4	o-Toluidine	1	ND		10.0	
120-82-1	1,2,4-Trichlorobenzene	1	51.2		10.0	
95-95-4	2,4,5-Trichlorophenol	1	30.0		25.0	
88-06-2	2,4,6-Trichlorophenol	1	29.5		10.0	
99-35-4	1,3,5-Trinitrobenzene (sym-Trinitrobenzene)	1	ND		10.0	

111 compound(s) reported
 Revision 1

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-MSD-02

Project: 1Q/99 GW SAMPLING

Lab ID: OHN-006MSD

Description: MATRIX SPIKE DUPLICATE

Method: SW 8260 Appendix IX Volatile Organics

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Episode: OHN

Sample Qu: D6

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 29306

Units: ug/l

Target List: 8260AP9WAT

Prep Factor: 1.00

Leached: n/a

Prepared:

Analyzed: 13-Feb-99 20:30 KC

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
67-64-1	Acetone (2-Propanone, Dimethyl ketone)	100	3200		1000	
75-05-8	Acetonitrile (Methyl cyanide)	100	ND		5000	
107-02-8	Acrolein (2-Propenal)	100	11200		1000	
107-13-1	Acrylonitrile (2-Propenenitrile)	100	6810		1000	
107-05-1	Allyl chloride (3-Chloropropene)	100	ND		500	
71-43-2	Benzene	100	4740		500	
75-27-4	Bromodichloromethane	100	4560		500	
75-25-2	Bromoform	100	4850		500	
74-83-9	Bromomethane (Methyl bromide)	100	4650		1000	
78-93-3	2-Butanone (Methyl ethyl ketone)	100	3900		1000	
75-15-0	Carbon disulfide	100	3870		500	
56-23-5	Carbon tetrachloride	100	5000		500	
108-90-7	Chlorobenzene	100	4780		500	
75-00-3	Chloroethane	100	4730		1000	
67-66-3	Chloroform	100	4300		500	
74-87-3	Chloromethane (Methyl chloride)	100	4930		1000	
126-99-8	Chloroprene (2-Chloro-1,3-butadiene)	100	ND		5000	
124-48-1	Dibromochloromethane	100	4830		500	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	100	4310		500	
106-93-4	1,2-Dibromoethane (Ethylene dibromide)	100	4480		500	
74-95-3	Dibromomethane (Methylene bromide)	100	4490		500	
110-57-6	trans-1,4-Dichloro-2-butene	100	ND		500	
75-71-8	Dichlorodifluoromethane (Freon 12)	100	ND		5000	
75-34-3	1,1-Dichloroethane	100	4250		500	
107-06-2	1,2-Dichloroethane (Ethylene dichloride)	100	4500		500	
75-35-4	1,1-Dichloroethene (Dichloroethylene)	100	4260		500	
156-60-5	trans-1,2-Dichloroethene	100	4320		500	
78-87-5	1,2-Dichloropropane	100	4710		500	
10061-01-5	cis-1,3-Dichloropropene	100	4640		500	
10061-02-6	trans-1,3-Dichloropropene	100	4440		500	
123-91-1	1,4-Dioxane	100	ND		50000	
100-41-4	Ethylbenzene	100	4760		500	
591-78-6	2-Hexanone	100	4500		1000	
74-88-4	Iodomethane (Methyl iodide)	100	4570		500	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:52:26

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans
Single Sample - Protocol

Client ID: <u>TAC-SWMU2-GW-MSD-02</u>	Client: <u>ECO-SYSTEMS, INCORPORATED/MS</u>	
Project: <u>1Q/99 GW SAMPLING</u>	Site: <u>None</u>	
Lab ID: <u>QHN-006MSD</u>	Episode: <u>QHN</u> Sample Qu: <u>D6</u>	
Description: <u>MATRIX SPIKE DUPLICATE</u>	Matrix: <u>Water</u> % Moisture: <u>n/a</u>	
Method: <u>SW 8260 Appendix IX Volatile Organics</u>	Prep Level: <u>Water</u> Batch: <u>29306</u>	
Prep Factor: <u>1.00</u>	Leached: <u>n/a</u>	Units: <u>ug/l</u> Target List: <u>8260AP9WAT</u>
		Prepared: Analyzed: <u>13-Feb-99 20:30 KC</u>

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
78-83-1	2-Methyl-1-propanol (iso-Butyl alcohol)	100	ND		50000	
126-98-7	Methacrylonitrile	100	ND		500	
75-09-2	Methylene chloride (Dichloromethane)	100	2960		500	
108-10-1	4-Methyl-2-pentanone (MIBK)	100	935	J	1000	
107-12-0	Propionitrile (Ethyl cyanide)	100	ND		1000	
100-42-4	Styrene	100	4890		500	
630-20-6	1,1,1,2-Tetrachloroethane	100	4860		500	
79-34-5	1,1,2,2-Tetrachloroethane	100	4260		500	
127-18-4	Tetrachloroethylene (Perchloroethylene)	100	4820		500	
108-88-3	Toluene	100	4700		500	
71-55-6	1,1,1-Trichloroethane (Methyl chloroform)	100	4880		500	
79-00-5	1,1,2-Trichloroethane	100	4500		500	
79-01-6	Trichloroethene (Trichloroethylene)	100	16200		500	
75-69-4	Trichlorofluoromethane (Freon 11)	100	4610		500	
96-18-4	1,2,3-Trichloropropane	100	4460		500	
108-05-4	Vinyl acetate	100	3840		1000	
75-01-4	Vinyl chloride (Chloroethylene)	100	5650		1000	
1330-20-7	Xylene (total)	100	14900		500	

52 compound(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.
DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.
Reporting Limit is corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:52:31

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans
Single Sample - Protocol

Client ID: TAC-SWMU2-GW-MSD-02

Project: 1Q/99 GW SAMPLING

Lab ID: QHN-006MSD

Description: MATRIX SPIKE DUPLICATE

Method: SW 8270 Appendix IX Semivolatile Organics

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Episode: QHN

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 29335

Units: ug/l

Target List: 8270AP9WAT

Prep Factor: 1.00

Leached: n/a

Prepared: 11-Feb-99

Analyzed: 24-Feb-99 12:25 JA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
83-32-9	Acenaphthene	1	28.6		10.0	
208-96-8	Acenaphthylene	1	27.0		10.0	
98-86-2	Acetophenone	1	ND		10.0	
53-96-3	2-Acetylaminofluorene	1	ND		10.0	
92-67-1	4-Aminobiphenyl	1	ND		10.0	
62-53-3	Aniline (Benzeneamine)	1	15.9		10.0	
120-12-7	Anthracene	1	26.5		10.0	
140-57-8	Aramite	1	ND		10.0	
56-55-3	Benzo(a)anthracene	1	34.6		10.0	
205-99-2	Benzo(b)fluoranthene	1	28.6		10.0	
207-08-09	Benzo(k)fluoranthene	1	26.7		10.0	
191-24-2	Benzo(g,h,i)perylene	1	28.1		10.0	
50-32-8	Benzo(a)pyrene	1	27.1		10.0	
100-51-6	Benzyl alcohol	1	32.3		10.0	
101-55-3	4-Bromophenyl phenyl ether	1	29.5		10.0	
85-68-7	Butylbenzylphthalate	1	38.9		10.0	
88-85-7	2-sec-Butyl-4,6-dinitrophenol (Dinoseb)	1	ND		10.0	
106-47-8	4-Chloroaniline (p-Chloroaniline)	1	12.1		10.0	
111-91-1	bis(2-Chloroethoxy)methane	1	29.5		10.0	
111-44-4	bis(2-Chloroethyl) ether	1	35.7		10.0	
108-60-1	bis(2-Chloroisopropyl) ether	1	37.5		10.0	
59-50-7	4-Chloro-3-methylphenol (p-Chloro-m-cresol)	1	30.4		10.0	
91-58-7	2-Chloronaphthalene	1	26.8		10.0	
95-57-8	2-Chlorophenol (o-Chlorophenol)	1	28.6		10.0	
7005-72-3	4-Chlorophenyl phenyl ether	1	27.0		10.0	
218-01-9	Chrysene	1	33.0		10.0	
53-70-3	Dibenz(a,h)anthracene	1	28.2		10.0	
132-64-9	Dibenzofuran	1	27.8		10.0	
84-74-2	Di-n-butylphthalate	1	32.2		10.0	
95-50-1	1,2-Dichlorobenzene (o-Dichlorobenzene)	1	23.1		10.0	
541-73-1	1,3-Dichlorobenzene (m-Dichlorobenzene)	1	24.2		10.0	
106-46-7	1,4-Dichlorobenzene (p-Dichlorobenzene)	1	23.7		10.0	
91-94-1	3,3'-Dichlorobenzidine	1	2.66 J		20.0	
120-83-2	2,4-Dichlorophenol	1	30.6		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:52:36

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans
Single Sample - Protocol

Client ID: TAC-SWMU2-GW-MSD-02

Client: ECO-SYSTEMS, INCORPORATED/MS

Project: 1Q/99 GW SAMPLING

Site: None

Lab ID: QHN-006MSD

Episode: QHN

Sample Qu:

Description: MATRIX SPIKE DUPLICATE

Matrix: Water

% Moisture: n/a

Method: SW 8270 Appendix IX Semivolatile Organics

Prep Level: Water

Batch: 29335

Prep Factor: 1.00

Leached: n/a

Units: ug/l

Target List: 8270AP9WAT

Prepared: 11-Feb-99

Analyzed: 24-Feb-99 12:25 JA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
87-65-0	2,6-Dichlorophenol	1	ND		10.0	
84-66-2	Diethylphthalate	1	28.4		10.0	
60-11-7	p-(Dimethylamino)azobenzene	1	ND		10.0	
57-97-6	7,12-Dimethylbenz(a)anthracene	1	ND		10.0	
119-93-7	3,3'-Dimethylbenzidine	1	ND		10.0	
122-09-8	alpha, alpha- Dimethylphenethylamine	1	ND		10.0	
105-67-9	2,4-Dimethylphenol	1	12.3		10.0	
131-11-3	Dimethylphthalate	1	28.6		10.0	
99-65-0	1,3-Dinitrobenzene (m-Dinitrobenzene)	1	ND		10.0	
534-52-1	4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	1	40.2		25.0	
51-28-5	2,4-Dinitrophenol	1	58.1		25.0	
121-14-2	2,4-Dinitrotoluene	1	33.1		10.0	
606-20-2	2,6-Dinitrotoluene	1	30.5		10.0	
117-84-0	Di-n-octylphthalate	1	31.4		10.0	
117-81-7	bis(2-Ethylhexyl)phthalate	1	43.8		10.0	
97-63-2	Ethyl methacrylate (2-Propenoic acid)	1	ND		10.0	
62-50-0	Ethyl methanesulfonate	1	ND		10.0	
206-44-0	Fluoranthene	1	29.9		10.0	
86-73-7	Fluorene	1	27.9		10.0	
118-74-1	Hexachlorobenzene	1	29.3		10.0	
87-68-3	Hexachlorobutadiene	1	29.0		10.0	
77-47-4	Hexachlorocyclopentadiene	1	13.5		10.0	
67-72-1	Hexachloroethane	1	26.8		10.0	
70-30-4	Hexachlorophene	1	ND		10.0	
1888-71-7	Hexachloropropene	1	ND		10.0	
193-39-5	Indeno(1,2,3-cd)pyrene	1	26.9		10.0	
78-59-1	Isophorone	1	34.3		10.0	
120-58-1	Isosafrole	1	ND		10.0	
91-80-5	Methapyrilene	1	ND		10.0	
56-49-5	3-Methylcholanthrene	1	ND		10.0	
80-62-6	Methyl methacrylate	1	ND		10.0	
66-27-3	Methyl methanesulfonate	1	ND		10.0	
91-57-6	2-Methylnaphthalene	1	34.8		10.0	
95-48-7	2-Methylphenol (o-Cresol)	1	26.3		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:52:40

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans
Single Sample - Protocol

Client ID: TAC-SWMU2-GW-MSD-02

Project: 1Q/99 GW SAMPLING

Lab ID: QHN-006MSD

Description: MATRIX SPIKE DUPLICATE

Method: SW 8270 Appendix IX Semivolatile Organics

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Episode: QHN

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 29335

Units: ug/l

Target List: 8270AP9WAT

Prepared: 11-Feb-99

Analyzed: 24-Feb-99 12:25 JA

Prep Factor: 1.00

Leached: n/a

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
108-39-4	3-Methylphenol (m-Cresol)	1	28.0	A7	10.0	
106-44-5	4-Methylphenol (p-Cresol)	1	28.0		10.0	
91-20-3	Naphthalene	1	29.0		10.0	
134-32-7	1-Naphthaleneamine (1-Naphthylamine)	1	ND		10.0	
91-59-8	2-Naphthaleneamine (2-Naphthylamine)	1	ND		10.0	
130-15-4	1,4-Naphthoquinone	1	ND		50.0	
88-74-4	2-Nitroaniline (o-Nitroaniline)	1	24.9	J	25.0	
99-09-2	3-Nitroaniline (m-Nitroaniline)	1	15.8	J	25.0	
100-01-6	4-Nitroaniline (p-Nitroaniline)	1	12.1	J	25.0	
98-95-3	Nitrobenzene	1	35.8		10.0	
88-75-5	2-Nitrophenol (o-Nitrophenol)	1	30.3		10.0	
100-02-7	4-Nitrophenol (p-Nitrophenol)	1	35.0		25.0	
56-57-2	4-Nitroquinoline-1-oxide	1	ND		10.0	
924-16-3	N-Nitrosodi-n-butylamine	1	ND		10.0	
55-18-5	N-Nitrosodiethylamine	1	ND		10.0	
62-75-9	N-Nitrosodimethylamine	1	29.5		10.0	
86-30-6	N-Nitrosodiphenylamine (Diphenylamine)	1	20.2	A10	10.0	
621-64-7	N-Nitroso-di-n-propylamine	1	33.0		10.0	
10595-95-6	N-Nitrosomethylalkylamine	1	ND		10.0	
59-89-2	N-Nitrosomorpholine	1	ND		10.0	
100-75-4	N-Nitrosopiperidine	1	ND		10.0	
930-55-2	N-Nitrosopyrrolidine	1	ND		10.0	
99-55-8	5-Nitro-o-toluidine	1	ND		10.0	
608-93-5	Pentachlorobenzene	1	ND		10.0	
76-01-7	Pentachloroethane	1	ND		10.0	
82-68-8	Pentachloronitrobenzene	1	ND		10.0	
87-86-5	Pentachlorophenol	1	44.8		25.0	
62-44-2	Phenacetin	1	ND		10.0	
85-01-8	Phenanthrene	1	27.9		10.0	
108-95-2	Phenol	1	35.6		10.0	
106-50-3	p-Phenylenediamine	1	ND		10.0	
109-06-08	2-Picoline (2-Methylpyridine)	1	ND		10.0	
23950-58-5	Pronamide	1	ND		10.0	
129-00-0	Pyrene	1	34.5		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:52:45

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans
Single Sample - Protocol

Client ID: TAC-SWMU2-GW-MSD-02

Project: 1Q/99 GW SAMPLING

Lab ID: OHN-006MSD

Description: MATRIX SPIKE DUPLICATE

Method: SW 8270 Appendix IX Semivolatile Organics

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Episode: OHN

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 29335

Units: ug/l

Target List: 8270AP9WAT

Prep Factor: 1.00

Leached: n/a

Prepared: 11-Feb-99

Analyzed: 24-Feb-99 12:25 JA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
110-86-1	Pyridine	1	24.8		10.0	
94-59-7	Safrole	1	ND		10.0	
95-94-3	1,2,4,5-Tetrachlorobenzene	1	ND		10.0	
58-90-2	2,3,4,6-Tetrachlorophenol	1	ND		10.0	
95-53-4	o-Toluidine	1	ND		10.0	
120-82-1	1,2,4-Trichlorobenzene	1	51.3		10.0	
95-95-4	2,4,5-Trichlorophenol	1	30.6		25.0	
88-06-2	2,4,6-Trichlorophenol	1	31.1		10.0	
99-35-4	1,3,5-Trinitrobenzene (sym-Trinitrobenzene)	1	ND		10.0	

111 compound(s) reported
Revision 1

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans
Single Sample - Protocol

Client ID: TAC-SWMU2-GW-04-02

Project: 1Q/99 GW SAMPLING

Lab ID: QHN-007

Description: None

Method: SW 8260 Appendix IX Volatile Organics

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Episode: QHN

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 29306

Units: ug/l

Target List: 8260AP9WAT

Prep Factor: 1.00

Leached: n/a

Prepared:

Analyzed: 18-Feb-99 15:56 KC

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
67-64-1	Acetone (2-Propanone, Dimethyl ketone)	5	ND	D2	50.0	
75-05-8	Acetonitrile (Methyl cyanide)	5	ND	D2	250	
107-02-8	Acrolein (2-Propenal)	5	ND	D2	50.0	
107-13-1	Acrylonitrile (2-Propenenitrile)	5	ND	D2	50.0	
107-05-1	Allyl chloride (3-Chloropropene)	5	ND	D2	25.0	
71-43-2	Benzene	5	ND	D2	25.0	
75-27-4	Bromodichloromethane	5	ND	D2	25.0	
75-25-2	Bromoform	5	ND	D2	25.0	
74-83-9	Bromomethane (Methyl bromide)	5	ND	D2	50.0	
78-93-3	2-Butanone (Methyl ethyl ketone)	5	ND	D2	50.0	
75-15-0	Carbon disulfide	5	ND	D2	25.0	
56-23-5	Carbon tetrachloride	5	ND	D2	25.0	
108-90-7	Chlorobenzene	5	ND	D2	25.0	
75-00-3	Chloroethane	5	ND	D2	50.0	
67-66-3	Chloroform	5	ND	D2	25.0	
74-87-3	Chloromethane (Methyl chloride)	5	ND	D2	50.0	
126-99-8	Chloroprene (2-Chloro-1,3-butadiene)	5	ND	D2	50.0	
124-48-1	Dibromochloromethane	5	ND	D2	250	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	5	ND	D2	25.0	
106-93-4	1,2-Dibromoethane (Ethylene dibromide)	5	ND	D2	25.0	
74-95-3	Dibromomethane (Methylene bromide)	5	ND	D2	25.0	
110-57-6	trans-1,4-Dichloro-2-butene	5	ND	D2	25.0	
75-71-8	Dichlorodifluoromethane (Freon 12)	5	ND	D2	250	
75-34-3	1,1-Dichloroethane	5	ND	D2	25.0	
107-06-2	1,2-Dichloroethane (Ethylene dichloride)	5	ND	D2	25.0	
75-35-4	1,1-Dichloroethylene (Dichloroethylene)	5	ND	D2	25.0	
156-60-5	trans-1,2-Dichloroethene	5	12.3	J D2	25.0	
78-87-5	1,2-Dichloropropane	5	ND	D2	25.0	
10061-01-5	cis-1,3-Dichloropropene	5	ND	D2	25.0	
10061-02-6	trans-1,3-Dichloropropene	5	ND	D2	25.0	
123-91-1	1,4-Dioxane	5	ND	D2	2500	
100-41-4	Ethylbenzene	5	ND	D2	25.0	
591-78-6	2-Hexanone	5	ND	D2	50.0	
74-88-4	Iodomethane (Methyl iodide)	5	ND	D2	25.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:52:55

PORATED/MS

:
: n/a
: 29306
: 8260AP9WAT
: 18-Feb-99 15:56 KC

Porting mit	Reg. Limit
50.0	
50	
50.0	
50.0	
25.0	
25.0	
25.0	
25.0	
50.0	
50.0	
25.0	
25.0	
50.0	
50.0	
50.0	
50	
25.0	
25.0	
25.0	
50	
25.0	
25.0	
25.0	
25.0	
25.0	
25.0	
25.0	
25.0	
25.0	
0	
25.0	
50.0	
25.0	

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-04-02

Project: 1Q/99 GW SAMPLING

Lab ID: QHN-007

Description: None

Method: SW 8260 Appendix IX Volatile Organics

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Episode: QHN

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 29306

Units: ug/l

Target List: 8260AP9WAT

Prep Factor: 1.00

Leached: n/a

Prepared:

Analyzed: 18-Feb-99 15:56 KC

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
78-83-1	2-Methyl-1-propanol (iso-Butyl alcohol)	5	ND	D2	2500	
126-98-7	Methacrylonitrile	5	ND	D2	25.0	
75-09-2	Methylene chloride (Dichloromethane)	5	ND	D2	25.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	5	ND	D2	50.0	
107-12-0	Propionitrile (Ethyl cyanide)	5	ND	D2	50.0	
100-42-4	Styrene	5	ND	D2	25.0	
630-20-6	1,1,1,2-Tetrachloroethane	5	ND	D2	25.0	
79-34-5	1,1,2,2-Tetrachloroethane	5	ND	D2	25.0	
127-18-4	Tetrachloroethene (Perchloroethylene)	5	ND	D2	25.0	
108-88-3	Toluene	5	ND	D2	25.0	
71-55-6	1,1,1-Trichloroethane (Methyl chloroform)	5	ND	D2	25.0	
79-00-5	1,1,2-Trichloroethane	5	ND	D2	25.0	
79-01-6	Trichloroethene (Trichloroethylene)	5	163	D2	25.0	
75-69-4	Trichlorofluoromethane (Freon 11)	5	ND	D2	25.0	
96-18-4	1,2,3-Trichloropropane	5	ND	D2	25.0	
108-05-4	Vinyl acetate	5	ND	D2	50.0	
75-01-4	Vinyl chloride (Chloroethene)	5	70.3	D2	50.0	
1330-20-7	Xylene (total)	5	ND	D2	25.0	

52 compound(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.
DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.
Reporting Limit is corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:53:00

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans

Single Sample - Protocol

Client ID: <u>TAC-SWMU2-GW-04-02</u>	Client: <u>ECO-SYSTEMS, INCORPORATED/MS</u>
Project: <u>1Q/99 GW SAMPLING</u>	Site: <u>None</u>
Lab ID: <u>QHN-007</u>	Episode: <u>QHN</u> Sample Qu:
Description: <u>None</u>	Matrix: <u>Water</u> % Moisture: <u>n/a</u>
Method: <u>SW 8270 Appendix IX Semivolatile Organics</u>	Prep Level: <u>Water</u> Batch: <u>29335</u>
Prep Factor: <u>1.00</u>	Leached: <u>n/a</u> Units: <u>ug/l</u> Target List: <u>8270AP9WAT</u>
	Prepared: <u>11-Feb-99</u> Analyzed: <u>24-Feb-99 0:14 JA</u>

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
83-32-9	Acenaphthene	1	ND		10.0	
208-96-8	Acenaphthylene	1	ND		10.0	
98-86-2	Acetophenone	1	ND		10.0	
53-96-3	2-Acetylaminofluorene	1	ND		10.0	
92-67-1	4-Aminobiphenyl	1	ND		10.0	
62-53-3	Aniline (Benzeneamine)	1	ND		10.0	
120-12-7	Anthracene	1	ND		10.0	
140-57-8	Aramite	1	ND		10.0	
56-55-3	Benzo(a)anthracene	1	ND		10.0	
205-99-2	Benzo(b)fluoranthene	1	ND		10.0	
207-08-09	Benzo(k)fluoranthene	1	ND		10.0	
191-24-2	Benzo(g,h,i)perylene	1	ND		10.0	
50-32-8	Benzo(a)pyrene	1	ND		10.0	
100-51-6	Benzyl alcohol	1	ND		10.0	
101-55-3	4-Bromophenyl phenyl ether	1	ND		10.0	
85-68-7	Butylbenzylphthalate	1	ND		10.0	
88-85-7	2-sec-Butyl-4-6-dinitrophenol (Dinoseb)	1	ND		10.0	
106-47-8	4-Chloroaniline (p-Chloroaniline)	1	ND		10.0	
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0	
111-44-4	bis(2-Chloroethyl) ether	1	ND		10.0	
108-60-1	bis(2-Chloroisopropyl) ether	1	ND		10.0	
59-50-7	4-Chloro-3-methylphenol (p-Chloro-m-cresol)	1	ND		10.0	
91-58-7	2-Chloronaphthalene	1	ND		10.0	
95-57-8	2-Chlorophenol (o-Chlorophenol)	1	ND		10.0	
7005-72-3	4-Chlorophenyl phenyl ether	1	ND		10.0	
218-01-9	Chrysene	1	ND		10.0	
53-70-3	Dibenz(a,h)anthracene	1	ND		10.0	
132-64-9	Dibenzofuran	1	ND		10.0	
84-74-2	Di-n-butylphthalate	1	ND		10.0	
95-50-1	1,2-Dichlorobenzene (o-Dichlorobenzene)	1	ND		10.0	
541-73-1	1,3-Dichlorobenzene (m-Dichlorobenzene)	1	ND		10.0	
106-46-7	1,4-Dichlorobenzene (p-Dichlorobenzene)	1	ND		10.0	
91-94-1	3,3'-Dichlorobenzidine	1	ND		20.0	
120-83-2	2,4-Dichlorophenol	1	ND		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:53:01

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-04-02

Project: 1Q/99 GW SAMPLING

Lab ID: QHN-007

Description: None

Method: SW 8270 Appendix IX Semivolatile Organics

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Episode: QHN

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 29335

Units: ug/l

Target List: 8270AP9WAT

Prep Factor: 1.00

Leached: n/a

Prepared: 11-Feb-99

Analyzed: 24-Feb-99 0:14 JA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
87-65-0	2,6-Dichlorophenol	1	ND		10.0	
84-66-2	Diethylphthalate	1	ND		10.0	
60-11-7	p-(Dimethylamino)azobenzene	1	ND		10.0	
57-97-6	7,12-Dimethylbenz(a)anthracene	1	ND		10.0	
119-93-7	3,3'-Dimethylbenzidine	1	ND		10.0	
122-09-8	alpha, alpha- Dimethylphenethylamine	1	ND		10.0	
105-67-9	2,4-Dimethylphenol	1	ND		10.0	
131-11-3	Dimethylphthalate	1	ND		10.0	
99-65-0	1,3-Dinitrobenzene (m-Dinitrobenzene)	1	ND		10.0	
534-52-1	4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	1	ND		25.0	
51-28-5	2,4-Dinitrophenol	1	ND		25.0	
121-14-2	2,4-Dinitrotoluene	1	ND		10.0	
606-20-2	2,6-Dinitrotoluene	1	ND		10.0	
117-84-0	Di-n-octylphthalate	1	ND		10.0	
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0	
97-63-2	Ethyl methacrylate (2-Propenoic acid)	1	ND		10.0	
62-50-0	Ethyl methanesulfonate	1	ND		10.0	
206-44-0	Fluoranthene	1	ND		10.0	
86-73-7	Fluorene	1	ND		10.0	
118-74-1	Hexachlorobenzene	1	ND		10.0	
87-68-3	Hexachlorobutadiene	1	ND		10.0	
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0	
67-72-1	Hexachloroethane	1	ND		10.0	
70-30-4	Hexachlorophene	1	ND		10.0	
1888-71-7	Hexachloropropene	1	ND		10.0	
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		10.0	
78-59-1	Isophorone	1	ND		10.0	
120-58-1	Isosafrole	1	ND		10.0	
91-80-5	Methapyrilene	1	ND		10.0	
56-49-5	3-Methylcholanthrene	1	ND		10.0	
80-62-6	Methyl methacrylate	1	ND		10.0	
66-27-3	Methyl methanesulfonate	1	ND		10.0	
91-57-6	2-Methylnaphthalene	1	ND		10.0	
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:53:05

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-04-02

Project: 1Q/99 GW SAMPLING

Lab ID: OHN-007

Description: None

Method: SW 8270 Appendix IX Semivolatile Organics

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Episode: OHN

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 29335

Units: ug/l

Target List: 8270AP9WAT

Prep Factor: 1.00

Leached: n/a

Prepared: 11-Feb-99

Analyzed: 24-Feb-99 0:14 JA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
108-39-4	3-Methylphenol (m-Cresol)	1	ND	A7	10.0	
106-44-5	4-Methylphenol (p-Cresol)	1	ND		10.0	
91-20-3	Naphthalene	1	ND		10.0	
134-32-7	1-Naphthaleneamine (1-Naphthylamine)	1	ND		10.0	
91-59-8	2-Naphthaleneamine (2-Naphthylamine)	1	ND		10.0	
130-15-4	1,4-Naphthoquinone	1	ND		50.0	
88-74-4	2-Nitroaniline (o-Nitroaniline)	1	ND		25.0	
99-09-2	3-Nitroaniline (m-Nitroaniline)	1	ND		25.0	
100-01-6	4-Nitroaniline (p-Nitroaniline)	1	ND		25.0	
98-95-3	Nitrobenzene	1	ND		10.0	
88-75-5	2-Nitrophenol (o-Nitrophenol)	1	ND		10.0	
100-02-7	4-Nitrophenol (p-Nitrophenol)	1	ND		10.0	
56-57-2	4-Nitroquinoline-1-oxide	1	ND		25.0	
924-16-3	N-Nitrosodi-n-butylamine	1	ND		10.0	
55-18-5	N-Nitrosodiethylamine	1	ND		10.0	
62-75-9	N-Nitrosodimethylamine	1	ND		10.0	
86-30-6	N-Nitrosodiphenylamine (Diphenylamine)	1	ND	A10	10.0	
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0	
10595-95-6	N-Nitrosomethylalkylamine	1	ND		10.0	
59-89-2	N-Nitrosomorpholine	1	ND		10.0	
100-75-4	N-Nitrosopiperidine	1	ND		10.0	
930-55-2	N-Nitrosopyrrolidine	1	ND		10.0	
99-55-8	5-Nitro-o-toluidine	1	ND		10.0	
608-93-5	Pentachlorobenzene	1	ND		10.0	
76-01-7	Pentachloroethane	1	ND		10.0	
82-68-8	Pentachloronitrobenzene	1	ND		10.0	
87-86-5	Pentachlorophenol	1	ND		25.0	
62-44-2	Phenacetin	1	ND		10.0	
85-01-8	Phenanthrene	1	ND		10.0	
108-95-2	Phenol	1	ND		10.0	
106-50-3	p-Phenylenediamine	1	ND		10.0	
109-06-08	2-Picoline (2-Methylpyridine)	1	ND		10.0	
23950-58-5	Pronamide	1	ND		10.0	
129-00-0	Pyrene	1	ND		10.0	

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of extract. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:53:10

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans

Single Sample - Protocol

Client ID: TAC-SWMU2-GW-04-02

Project: 1Q/99 GW SAMPLING

Lab ID: OHN-007

Description: None

Method: SW 8270 Appendix IX Semivolatile Organics

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Episode: OHN

Sample Qu:

Matrix: Water

% Moisture: n/a

Prep Level: Water

Batch: 29335

Units: ug/l

Target List: 8270AP9WAT

Prep Factor: 1.00

Leached: n/a

Prepared: 11-Feb-99

Analyzed: 24-Feb-99 0:14 JA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
110-86-1	Pyridine	1	ND		10.0	
94-59-7	Safrole	1	ND		10.0	
95-94-3	1,2,4,5-Tetrachlorobenzene	1	ND		10.0	
58-90-2	2,3,4,6-Tetrachlorophenol	1	ND		10.0	
95-53-4	o-Toluidine	1	ND		10.0	
120-82-1	1,2,4-Trichlorobenzene	1	ND		10.0	
95-95-4	2,4,5-Trichlorophenol	1	ND		25.0	
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0	
99-35-4	1,3,5-Trinitrobenzene (sym-Trinitrobenzene)	1	ND		10.0	

111 compound(s) reported

Revision 1

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans

Single Sample - Protocol

Client ID: TAC-SWMU2-TB-02

Client: ECO-SYSTEMS, INCORPORATED/MS

Project: 1Q/99 GW SAMPLING

Site: None

Lab ID: QHN-008

Episode: QHN

Sample Qu:

Description: None

Matrix: Water

% Moisture: n/a

Method: SW 8260 Appendix IX Volatile Organics

Prep Level: Water

Batch: 29306

Units: ug/l

Target List: 8260AP9WAT

Prep Factor: 1.00

Leached: n/a

Prepared:

Analyzed: 13-Feb-99 3:03 KC

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit	Reg. Limit
78-83-1	2-Methyl-1-propanol (iso-Butyl alcohol)	1	ND		500	
126-98-7	Methacrylonitrile	1	ND		5.00	
75-09-2	Methylene chloride (Dichloromethane)	1	ND		5.00	
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0	
107-12-0	Propionitrile (Ethyl cyanide)	1	ND		10.0	
100-42-4	Styrene	1	ND		5.00	
630-20-6	1,1,1,2-Tetrachloroethane	1	ND		5.00	
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00	
127-18-4	Tetrachloroethene (Perchloroethylene)	1	ND		5.00	
108-88-3	Toluene	1	ND		5.00	
71-55-6	1,1,1-Trichloroethane (Methyl chloroform)	1	ND		5.00	
79-00-5	1,1,2-Trichloroethane	1	ND		5.00	
79-01-6	Trichloroethene (Trichloroethylene)	1	ND		5.00	
75-69-4	Trichlorofluoromethane (Freon 11)	1	ND		5.00	
96-18-4	1,2,3-Trichloropropane	1	ND		5.00	
108-05-4	Vinyl acetate	1	ND		10.0	
75-01-4	Vinyl chloride (Chloroethene)	1	ND		10.0	
1330-20-7	Xylene (total)	1	ND		5.00	

52 compound(s) reported

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans
Single Sample - Inorganic Parameters

Client ID: TAC-SWMU2-GW-05-02

Client: ECO-SYSTEMS, INCORPORATED/MS

Project: 1Q/99 GW SAMPLING

Site: None

Lab ID: QHN-001

Episode: QHN

Description: None

Matrix: Water

%Moisture: n/a

ParameterName	Method	Batch	DF	PF	Result	Qu	Reporting		Prep.	Analysis	Reg. Limit
							Units	Limit			
Arsenic	SW 6010	29274	1	1	ND		ug/l	10.0	09-Feb-99	10-Feb-99	9:57 KJR
Barium	SW 6010	29274	1	1	ND		ug/l	200	09-Feb-99	10-Feb-99	9:57 KJR
Cadmium	SW 6010	29274	1	1	ND		ug/l	5.00	09-Feb-99	10-Feb-99	9:57 KJR
Chromium	SW 6010	29274	1	1	128		ug/l	10.0	09-Feb-99	10-Feb-99	9:57 KJR
Lead	SW 6010	29274	1	1	ND		ug/l	3.00	09-Feb-99	10-Feb-99	9:57 KJR
Mercury	SW 7470	29260	1	1	ND		ug/l	0.200	09-Feb-99	09-Feb-99	13:43 DNT
Selenium	SW 6010	29274	1	1	ND		ug/l	5.00	09-Feb-99	10-Feb-99	9:57 KJR
Silver	SW 6010	29274	1	1	ND		ug/l	10.0	09-Feb-99	10-Feb-99	9:57 KJR

8 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.
DF denotes Dilution Factor of final sample. The Prep Factor accounts for a non-routine sample size.
Reporting Limit is corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:53:44

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans
Single Sample - Inorganic Parameters

Client ID: TAC-SWMU2-GW-01-02

Client: ECO-SYSTEMS, INCORPORATED/MS

Project: 1Q/99 GW SAMPLING

Site: None

Lab ID: QHN-002

Episode: QHN

Description: None

Matrix: Water

%Moisture: n/a

ParameterName	Method	Batch	DF	PF	Result	Qu	Units	Reporting Limit		Prep.	Analysis	Reg. Limit
								Limit	Prep.			
Arsenic	SW 6010	29274	1	1	ND		ug/l	10.0	09-Feb-99	10-Feb-99	10:03	KJR
Barium	SW 6010	29274	1	1	ND		ug/l	200	09-Feb-99	10-Feb-99	10:03	KJR
Cadmium	SW 6010	29274	1	1	ND		ug/l	5.00	09-Feb-99	10-Feb-99	10:03	KJR
Chromium	SW 6010	29274	1	1	ND		ug/l	10.0	09-Feb-99	10-Feb-99	10:03	KJR
Lead	SW 6010	29274	1	1	ND		ug/l	3.00	09-Feb-99	10-Feb-99	10:03	KJR
Mercury	SW 7470	29260	1	1	ND		ug/l	0.200	09-Feb-99	09-Feb-99	13:45	DNT
Selenium	SW 6010	29274	1	1	ND		ug/l	5.00	09-Feb-99	10-Feb-99	10:03	KJR
Silver	SW 6010	29274	1	1	ND		ug/l	10.0	09-Feb-99	10-Feb-99	10:03	KJR

8 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.
DF denotes Dilution Factor of final sample. The Prep Factor accounts for a non-routine sample size.
Reporting Limit is corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:53:49

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans
Single Sample - Inorganic Parameters

Client ID: TAC-SWMU2-GW-02-02

Client: ECO-SYSTEMS, INCORPORATED/MS

Project: 1Q/99 GW SAMPLING

Site: None

Lab ID: QHN-003

Episode: QHN

Description: None

Matrix: Water

%Moisture: n/a

ParameterName	Method	Batch	DF	PF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Arsenic	SW 6010	29274	1	1	10.6		ug/l	10.0	09-Feb-99	10-Feb-99	10:08 KJR
Barium	SW 6010	29274	1	1	ND		ug/l	200	09-Feb-99	10-Feb-99	10:08 KJR
Cadmium	SW 6010	29274	1	1	ND		ug/l	5.00	09-Feb-99	10-Feb-99	10:08 KJR
Chromium	SW 6010	29274	1	1	26500		ug/l	10.0	09-Feb-99	10-Feb-99	10:08 KJR
Lead	SW 6010	29274	1	1	ND		ug/l	3.00	09-Feb-99	10-Feb-99	10:08 KJR
Mercury	SW 7470	29260	1	1	ND		ug/l	0.200	09-Feb-99	09-Feb-99	13:47 DNT
Selenium	SW 6010	29274	1	1	ND		ug/l	5.00	09-Feb-99	10-Feb-99	10:08 KJR
Silver	SW 6010	29274	1	1	ND		ug/l	10.0	09-Feb-99	10-Feb-99	10:08 KJR

8 parameter(s) reported

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans

Single Sample - Inorganic Parameters

Client ID: TAC-SWMU2-GW-02-02D
Project: 1Q/99 GW SAMPLING
Lab ID: QHN-004
Description: None

Client: ECO-SYSTEMS, INCORPORATED/MS
Site: None
Episode: QHN
Matrix: Water **%Moisture:** n/a

Parameter Name	Method	Batch	DF	PF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Arsenic	SW 6010	29274	1	1	ND		ug/l	10.0	09-Feb-99	10-Feb-99	9:36 KJR
Barium	SW 6010	29274	1	1	ND		ug/l	200	09-Feb-99	10-Feb-99	9:36 KJR
Cadmium	SW 6010	29274	1	1	ND		ug/l	5.00	09-Feb-99	10-Feb-99	9:36 KJR
Chromium	SW 6010	29274	1	1	26400		ug/l	10.0	09-Feb-99	10-Feb-99	9:36 KJR
Lead	SW 6010	29274	1	1	ND		ug/l	3.00	09-Feb-99	10-Feb-99	9:36 KJR
Mercury	SW 7470	29260	1	1	ND		ug/l	0.200	09-Feb-99	09-Feb-99	13:32 DNT
Selenium	SW 6010	29274	1	1	ND		ug/l	5.00	09-Feb-99	10-Feb-99	9:36 KJR
Silver	SW 6010	29274	1	1	ND		ug/l	10.0	09-Feb-99	10-Feb-99	9:36 KJR

8 parameter(s) reported

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans
Single Sample - Inorganic Parameters

Client ID: TAC-SWMU2-GW-MS-02

Project: 1Q/99 GW SAMPLING

Lab ID: QHN-005S

Description: MATRIX SPIKE

Client: ECO-SYSTEMS, INCORPORATED/MS

Site: None

Episode: QHN

Matrix: Water

%Moisture: n/a

ParameterName	Method	Batch	DF	PF	Result	Qu	Reporting		Prep.	Analysis	Reg. Limit
							Units	Limit			
Arsenic	SW 6010	29274	1	1	1760		ug/l	10.0	09-Feb-99	10-Feb-99	9:40 KJR
Barium	SW 6010	29274	1	1	1810		ug/l	200	09-Feb-99	10-Feb-99	9:40 KJR
Cadmium	SW 6010	29274	1	1	39.9		ug/l	5.00	09-Feb-99	10-Feb-99	9:40 KJR
Chromium	SW 6010	29274	1	1	27700		ug/l	10.0	09-Feb-99	10-Feb-99	9:40 KJR
Lead	SW 6010	29274	1	1	466		ug/l	3.00	09-Feb-99	10-Feb-99	9:40 KJR
Mercury	SW 7470	29260	1	1	0.879		ug/l	0.200	09-Feb-99	09-Feb-99	13:38 DNT
Selenium	SW 6010	29274	1	1	1690		ug/l	5.00	09-Feb-99	10-Feb-99	9:40 KJR
Silver	SW 6010	29274	1	1	38.0		ug/l	10.0	09-Feb-99	10-Feb-99	9:40 KJR

8 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. The Prep Factor accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

3/30/99 12:54:00

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans

Single Sample - Inorganic Parameters

Client ID: **TAC-SWMU2-GW-MSD-02**

Client: **ECO-SYSTEMS, INCORPORATED/MS**

Project: **1Q/99 GW SAMPLING**

Site: **None**

Lab ID: **QHN-006SD**

Episode: **QHN**

Description: **MATRIX SPIKE DUPLICATE**

Matrix: **Water**

%Moisture: **n/a**

ParameterName	Method	Batch	DF	PF	Result	Qu	Units	Reporting		Prep.	Analysis	Reg. Limit
								Limit				
Arsenic	SW 6010	29274	1	1	1770		ug/l	10.0	09-Feb-99	10-Feb-99	10:36	KJR
Barium	SW 6010	29274	1	1	1770		ug/l	200	09-Feb-99	10-Feb-99	10:36	KJR
Cadmium	SW 6010	29274	1	1	39.8		ug/l	5.00	09-Feb-99	10-Feb-99	10:36	KJR
Chromium	SW 6010	29274	1	1	27100		ug/l	10.0	09-Feb-99	10-Feb-99	10:36	KJR
Lead	SW 6010	29274	1	1	467		ug/l	3.00	09-Feb-99	10-Feb-99	10:36	KJR
Mercury	SW 7470	29260	1	1	0.871		ug/l	0.200	09-Feb-99	09-Feb-99	13:40	DNT
Selenium	SW 6010	29274	1	1	1710		ug/l	5.00	09-Feb-99	10-Feb-99	10:36	KJR
Silver	SW 6010	29274	1	1	37.9		ug/l	10.0	09-Feb-99	10-Feb-99	10:36	KJR

8 parameter(s) reported

RATED/MS

n/a

	Reg. Limit
✓	10:36 KJR
✓	13:40 DNT
✓	10:36 KJR
✓	10:36 KJR

Report of Laboratory Analysis
Pace Analytical Services, Inc. - New Orleans
Single Sample - Inorganic Parameters

Client ID: TAC-SWMU2-GW-04-02

Client: ECO-SYSTEMS, INCORPORATED/MS

Project: 1Q/99 GW SAMPLING

Site: None

Lab ID: QHN-007

Episode: QHN

Description: None

Matrix: Water

%Moisture: n/a

ParameterName	Method	Batch	DF	PF	Result	Qu	Units	Reporting		Prep.	Analysis	Reg. Limit
								Limit				
Arsenic	SW 6010	29274	1	1	ND		ug/l	10.0	09-Feb-99	10-Feb-99	10:14	KJR
Barium	SW 6010	29274	1	1	ND		ug/l	200	09-Feb-99	10-Feb-99	10:14	KJR
Cadmium	SW 6010	29274	1	1	ND		ug/l	5.00	09-Feb-99	10-Feb-99	10:14	KJR
Chromium	SW 6010	29274	1	1	ND		ug/l	10.0	09-Feb-99	10-Feb-99	10:14	KJR
Lead	SW 6010	29274	1	1	ND		ug/l	3.00	09-Feb-99	10-Feb-99	10:14	KJR
Mercury	SW 7470	29260	1	1	ND		ug/l	0.200	09-Feb-99	09-Feb-99	13:49	DNT
Selenium	SW 6010	29274	1	1	ND		ug/l	5.00	09-Feb-99	10-Feb-99	10:14	KJR
Silver	SW 6010	29274	1	1	ND		ug/l	10.0	09-Feb-99	10-Feb-99	10:14	KJR

8 parameter(s) reported

Report of Quality Control
Pace Analytical Services, Inc. - New Orleans
Organic Protocol - Single Batch

Episode: QHN

Method: Water GC/MS Volatile Organics

Batch: 29306

Units: ug/l

Parameter Name	LCS Spike	LCS %Rec	LCSD %Rec	MS Spike	MS %Rec	MSD %Rec	RPD %	QC Limits		RPD Max	Qu
								LCS	MS/MSD		
Acetone (2-Propanone, Dimethyl ketone)	50.0	64		5000	66	64	3	1-200	1-200	50	
Benzene	50.0	92		5000	96	95	1	76-127	76-127	11	
Bromodichloromethane	50.0	89		5000	91	91	0	1-200	1-200	50	
Bromoform	50.0	94		5000	94	97	3	1-200	1-200	50	
Bromomethane (Methyl bromide)	50.0	88		5000	92	93	1	1-200	1-200	50	
2-Butanone (Methyl ethyl ketone)	50.0	75		5000	77	78	1	1-200	1-200	50	
Carbon disulfide	50.0	73		5000	76	77	2	1-200	1-200	50	
Carbon tetrachloride	50.0	99		5000	102	100	2	1-200	1-200	50	
Chlorobenzene	50.0	94		5000	95	96	0	75-130	75-130	13	
Chloroethane	50.0	87		5000	92	95	3	1-200	1-200	50	
Chloroform	50.0	83		5000	85	86	1	1-200	1-200	50	
Chloromethane (Methyl chloride)	50.0	93		5000	99	99	0	1-200	1-200	50	
Dibromochloromethane	50.0	95		5000	96	97	1	1-200	1-200	50	
1,1-Dichloroethane	50.0	80		5000	84	85	2	1-200	1-200	50	
1,2-Dichloroethane (Ethylene dichloride)	50.0	89		5000	91	90	2	1-200	1-200	50	
1,1-Dichloroethylene (Dichloroethylene)	50.0	80		5000	83	85	2	61-145	61-145	14	
1,2-Dichloroethylene (total)	100	83		10000	86	88	2	1-200	1-200	50	
1,2-Dichloropropane	50.0	91		5000	94	94	0	1-200	1-200	50	
cis-1,3-Dichloropropene	50.0	92		5000	92	93	0	1-200	1-200	50	
trans-1,3-Dichloropropene	50.0	88		5000	89	89	0	1-200	1-200	50	
Ethylbenzene	50.0	95		5000	92	95	4	1-200	1-200	50	
2-Hexanone	50.0	87		5000	89	90	1	1-200	1-200	50	
Methylene chloride (Dichloromethane)	50.0	55		5000	58	59	2	1-200	1-200	50	
4-Methyl-2-pentanone (MIBK)	50.0	74		5000	20	19	6	1-200	1-200	50	
Styrene	50.0	94		5000	95	98	2	1-200	1-200	50	
1,1,2,2-Tetrachloroethane	50.0	82		5000	85	85	0	1-200	1-200	50	
Tetrachloroethene (Perchloroethylene)	50.0	93		5000	96	96	0	1-200	1-200	50	
Toluene	50.0	92		5000	94	94	0	76-125	76-125	13	
1,1,1-Trichloroethane (Methyl chloroform)	50.0	94		5000	97	98	0	1-200	1-200	50	
1,1,2-Trichloroethane	50.0	89		5000	89	90	1	1-200	1-200	50	
Trichloroethene (Trichloroethylene)	50.0	90		5000	118	112	2	71-120	71-120	14	
Vinyl chloride (Chloroethene)	50.0	89		5000	97	98	1	1-200	1-200	50	
Xylene (total)	150	95		15000	98	99	1	1-200	1-200	50	

33 compound(s) reported

Report of Quality Control
Pace Analytical Services, Inc. - New Orleans
Organic Protocol - Single Batch

Episode: QHN

Method: Water GC/MS Semivolatile Organics

Batch: 29335

Units: ug/l

Parameter Name	LCS Spike	LCS %Rec	LCSD %Rec	MS Spike	MS %Rec	MSD %Rec	RPD %	QC Limits		RPD Max	Qu
Acenaphthene	50.0	60		50.0	57	57	1	46-118	46-118	31	
Acenaphthylene	50.0	55		50.0	53	54	1	1-200	1-200	35	
Anthracene	50.0	60		50.0	53	53	1	1-200	1-200	35	
Benzo(a)anthracene	50.0	63		50.0	68	69	2	1-200	1-200	35	
Benzo(b)fluoranthene	50.0	61		50.0	57	57	1	1-200	1-200	35	
Benzo(k)fluoranthene	50.0	50		50.0	52	53	2	1-200	1-200	35	
Benzo(g,h,i)perylene	50.0	54		50.0	59	56	5	1-200	1-200	35	
Benzo(a)pyrene	50.0	54		50.0	53	54	1	1-200	1-200	35	
Benzyl alcohol	50.0	61		50.0	64	65	1	1-200	1-200	35	
4-Bromophenyl phenyl ether	50.0	60		50.0	57	59	3	1-200	1-200	35	
Butylbenzylphthalate	50.0	67		50.0	76	78	3	1-200	1-200	35	
4-Chloroaniline (p-Chloroaniline)	50.0	49		50.0	24	24	1	1-200	1-200	35	
bis(2-Chloroethoxy)methane	50.0	63		50.0	58	59	1	1-200	1-200	35	
bis(2-Chloroethyl) ether	50.0	60		50.0	76	71	6	1-200	1-200	35	
bis(2-Chloroisopropyl) ether	50.0	70		50.0	76	75	2	1-200	1-200	35	
4-Chloro-3-methylphenol (p-Chloro-m-cresol)	50.0	63		50.0	58	61	4	23-97	23-97	42	
2-Chloronaphthalene	50.0	56		50.0	54	54	1	1-200	1-200	35	
2-Chlorophenol (α -Chlorophenol)	50.0	64		50.0	61	57	6	27-123	27-123	40	
4-Chlorophenyl phenyl ether	50.0	56		50.0	54	54	0	1-200	1-200	35	
Chrysene	50.0	65		50.0	66	66	0	1-200	1-200	35	
Dibenz(a,h)anthracene	50.0	53		50.0	56	56	0	1-200	1-200	35	
Dibenzo furan	50.0	62		50.0	57	56	2	1-200	1-200	35	
Di-n-butylphthalate	50.0	71		50.0	65	64	2	1-200	1-200	35	
1,2-Dichlorobenzene (o-Dichlorobenzene)	50.0	45		50.0	49	46	6	1-200	1-200	35	
1,3-Dichlorobenzene (m-Dichlorobenzene)	50.0	43		50.0	52	48	6	1-200	1-200	35	
1,4-Dichlorobenzene (p-Dichlorobenzene)	50.0	43		50.0	50	47	5	36-97	36-97	28	
3,3'-Dichlorobenzidine	50.0	48		50.0	0 *	5	200 *	1-200	1-200	35	
2,4-Dichlorophenol	50.0	59		50.0	61	61	0	1-200	1-200	35	
Diethylphthalate	50.0	61		50.0	57	57	0	1-200	1-200	35	
2,4-Dimethylphenol	50.0	43		50.0	24	25	1	1-200	1-200	35	
Dimethylphthalate	50.0	62		50.0	60	57	4	1-200	1-200	35	
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	50.0	67		50.0	78	80	3	1-200	1-200	35	
2,4-Dinitrophenol	50.0	79		50.0	115	116	1	1-200	1-200	35	
2,4-Dinitrotoluene	50.0	65		50.0	66	66	1	24-96	24-96	38	
2,6-Dinitrotoluene	50.0	60		50.0	64	61	5	1-200	1-200	35	
Di-n-octylphthalate	50.0	66		50.0	62	63	2	1-200	1-200	35	
bis(2-Ethylhexyl)phthalate	50.0	83		50.0	84	88	4	1-200	1-200	35	
Fluoranthene	50.0	62		50.0	61	60	1	1-200	1-200	35	
Fluorene	50.0	56		50.0	56	56	0	1-200	1-200	35	
Hexachlorobenzene	50.0	63		50.0	60	59	3	1-200	1-200	35	
Hexachlorobutadiene	50.0	55		50.0	55	58	5	1-200	1-200	35	
Hexachlorocyclopentadiene	50.0	0 *		50.0	28	27	4	1-200	1-200	35	

* denotes recovery outside of QC limits.

MS spike concentrations are not corrected for moisture content of the spiked sample.

Report of Quality Control
Pace Analytical Services, Inc. - New Orleans
Organic Protocol - Single Batch

Episode: QHN

Method: Water GC/MS Semivolatile Organics

Batch: 29335

Units: ug/l

Parameter Name	LCS	LCS	LCSD	MS	MS	MSD	RPD	QC Limits		RPD	Qu
	Spike	%Rec	%Rec	Spike	%Rec	%Rec	%	LCS	MS/MSD	Max	
Hexachloroethane	50.0	44		50.0	54	54	1	1-200	1-200	35	
Indeno(1,2,3-cd)pyrene	50.0	54		50.0	55	54	2	1-200	1-200	35	
Isophorone	50.0	70		50.0	70	69	1	1-200	1-200	35	
2-Methylnaphthalene	50.0	58		50.0	60	64	6	1-200	1-200	35	
2-Methylphenol (o-Cresol)	50.0	55		50.0	55	53	4	1-200	1-200	35	
4-Methylphenol (p-Cresol)	50.0	50		50.0	58	56	4	1-200	1-200	35	
Naphthalene	50.0	54		50.0	59	58	1	1-200	1-200	35	
2-Nitroaniline (o-Nitroaniline)	50.0	71		50.0	53	50	6	1-200	1-200	35	
3-Nitroaniline (m-Nitroaniline)	50.0	49		50.0	32	32	0	1-200	1-200	35	
4-Nitroaniline (p-Nitroaniline)	50.0	52		50.0	24	24	1	1-200	1-200	35	
Nitrobenzene	50.0	61		50.0	69	72	4	1-200	1-200	35	
2-Nitrophenol (o-Nitrophenol)	50.0	64		50.0	60	61	1	1-200	1-200	35	
4-Nitrophenol (p-Nitrophenol)	50.0	69		50.0	74	70	6	10-80	10-80	50	
N-Nitrosodimethylamine	50.0	53		50.0	64	59	8	1-200	1-200		
N-Nitrosodiphenylamine (Diphenylamine)	50.0	58		50.0	40	40	0	1-200	1-200	35	
N-Nitroso-di-n-propylamine	50.0	64		50.0	65	66	2	41-116	41-116	38	
Pentachlorophenol	50.0	63		50.0	78	79	2	9-103	9-103	50	
Phenanthrene	50.0	59		50.0	56	56	1	1-200	1-200	35	
Phenol	50.0	76		50.0	67	71	5	12-110	12-110	42	
Pyrene	50.0	59		50.0	64	69	7	26-127	26-127	31	
Pyridine	50.0	47		50.0	51	50	2	1-200	1-200	35	
1,2,4-Trichlorobenzene	50.0	52		50.0	76	76	0	39-98	39-98	28	
2,4,5-Trichlorophenol	50.0	60		50.0	60	61	2	1-200	1-200	35	
2,4,6-Trichlorophenol	50.0	60		50.0	59	62	5	1-200	1-200	35	

66 compound(s) reported

* denotes recovery outside of QC limits.

MS spike concentrations are not corrected for moisture content of the spiked sample.

3/30/99 12:54:33

Report of Batch Surrogate Recovery
Pace Analytical Services, Inc. - New Orleans

Organic Protocol - Single Batch

Method: Water GC/MS Volatile Organics

Episode: QHN

Batch: 29306

Lab ID	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
29306B1K12	91	95	109					
29306BA04	104	91	89					
29306BK10	90	93	90					
29306BK13	90	97	93					
29306BK15	90	95	89					
29306BK18	89	93	87					
29306BL11	93	90	106					
29306BM05	99	92	97					
29306SK13	92	93	94					
QGU-001	95	94	104					
QGU-001RE	88	96	88					
QGU-002	95	92	102					
QHN-001	95	94	109					
QHN-001DL	91	94	96					
QHN-002	91	94	93					
QHN-003	92	96	105					
QHN-003DL	91	97	108					
QHN-004	91	97	103					
QHN-004DL	90	96	108					
QHN-005MS	92	95	94					
QHN-006MSD	92	93	96					
QHN-007	89	95	87					
QHN-008	90	92	104					
QHR-001	92	88	107					
QHR-002	96	89	107					
QHR-003	91	90	107					
QHR-004	92	91	104					
QJG-001	90	96	95					
QJG-002	91	96	97					
QJG-003	92	95	96					
QJG-004	93	94	98					
QOK-001	99	89	91					
QRC-010	113 *	86	90					
QRC-010RE	102	93	80 *					
QRC-011	113 *	85 *	90					
QRC-011RE	103	90	84 *					
QRC-012	112 *	92	88					
QRC-012RE	104	94	85 *					

* denotes surrogate recovery outside of QC limits.

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

A Lab ID consisting of a batch number with a B suffix is a method blank.

A Lab ID consisting of a batch number with a S suffix is an LCS.

A Lab ID with a MS suffix is a matrix spike.

A Lab ID with a MSD suffix is a matrix spike duplicate.

3/30/99 12:54:58

Report of Batch Surrogate Recovery
Pace Analytical Services, Inc. - New Orleans
Organic Protocol - Single Batch

Method: Water GC/MS Volatile Organics

Episode: QHN

Batch: 29306

Lab ID	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
--------	---------------	---------------	---------------	---------------	---------------	---------------	---------------	---------------

QC limits:	88 - 110	86 - 115	86 - 118					
------------	----------	----------	----------	--	--	--	--	--

Sur 1: Toluene-d8 (S)

Sur 2: 4-Bromofluorobenzene (S)

Sur 3: Dibromofluoromethane (S)

* denotes surrogate recovery outside of QC limits.

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

A Lab ID consisting of a batch number with a B suffix is a method blank.

A Lab ID consisting of a batch number with a S suffix is an LCS.

A Lab ID with a MS suffix is a matrix spike.

A Lab ID with a MSD suffix is a matrix spike duplicate.

3/30/99 12:55:01

Report of Batch Surrogate Recovery
Pace Analytical Services, Inc. - New Orleans
Organic Protocol - Single Batch

Method: Water GC/MS Semivolatile Organics

Episode: QHN

Batch: 29335

Lab ID	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
29335B1	27 *	40 *	33	30	26	28		
29335B2	54	63	79	58	35	98		
29335B3	48	48	66	46	39	60		
29335B4	65	53	71	63	52	66		
29335B5	79	71	82	77	67	77		
29335B6	85	72	81	81	73	79		
29335B7	78	56	84	80	65	74		
29355S1	64	57	59	75	62	76		
QHN-001	54	40 *	66	62	52	57		
QHN-002	72	52	70	76	68	61		
QHN-003	52	39 *	68	62	50	61		
QHN-004	68	45	74	31	35	58		
QHN-005MS	71	53	66	75	66	80		
QHN-006MSD	70	50	68	74	63	80		
QHN-007	46	31 *	48	45	35	40		
QOB-009	40	44	50	59	30	57		
QRK-004	55	56	73	54	48	64		
QRK-007	36	37 *	49	36	30	39		
QRZ-008	54	50	76	52	41	71		
QSH-001	70	56	33	67	55	73		
QSH-002	77	68	71	73	62	77		
QTW-001	77	69	78	76	67	74		
QTZ-003	80	37 *	87	62	64	92		
QUM-008	75	56	74	75	62	69		
QUP-001	65	49	56	67	53	75		
QUP-002	78	58	66	75	62	95		
QUP-002RE	98	64	76	89	72	116		

QC limits: **35 - 114** **43 - 116** **33 - 141** **10 - 94** **21 - 100** **10 - 123**

Sur 1: Nitrobenzene-d5 (S)

Sur 2: 2-Fluorobiphenyl (S)

Sur 3: Terphenyl-d14 (S)

Sur 4: Phenol-d5 (S)

Sur 5: 2-Fluorophenol (S)

Sur 6: 2,4,6-Tribromophenol (S)

* denotes surrogate recovery outside of QC limits.

D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.

A Lab ID consisting of a batch number with a B suffix is a method blank.

A Lab ID consisting of a batch number with a S suffix is an LCS.

A Lab ID with a MS suffix is a matrix spike.

A Lab ID with a MSD suffix is a matrix spike duplicate.

3/30/99 12:55:05

Report of Method Blank
Pace Analytical Services, Inc. - New Orleans
Organic Protocol - Single Batch

Lab ID: 29306B1K12

Description: Water Method Blank

Episode: OHN

% Moisture: n/a

Method: Water GC/MS Volatile Organics

Batch: 29306

Units: ug/l

Prep Factor: 1

Leached: n/a

Prepared:

Analyzed: 13-Feb-99 1:06 KC

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
67-64-1	Acetone (2-Propanone, Dimethyl ketone)	1	ND		10.0
75-05-8	Acetonitrile (Methyl cyanide)	1	ND		50.0
107-02-8	Acrolein (2-Propenal)	1	ND		10.0
107-13-1	Acrylonitrile (2-Propenenitrile)	1	ND		10.0
107-05-1	Allyl chloride (3-Chloropropene)	1	ND		5.00
71-43-2	Benzene	1	ND		5.00
75-27-4	Bromodichloromethane	1	ND		5.00
75-25-2	Bromoform	1	ND		5.00
74-83-9	Bromomethane (Methyl bromide)	1	ND		10.0
78-93-3	2-Butanone (Methyl ethyl ketone)	1	ND		10.0
75-15-0	Carbon disulfide	1	ND		5.00
56-23-5	Carbon tetrachloride	1	ND		5.00
108-90-7	Chlorobenzene	1	ND		5.00
75-00-3	Chloroethane	1	ND		10.0
67-66-3	Chloroform	1	ND		5.00
74-87-3	Chloromethane (Methyl chloride)	1	ND		10.0
126-99-8	Chloroprene (2-Chloro-1,3-butadiene)	1	ND		50.0
124-48-1	Dibromochloromethane	1	ND		5.00
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	1	ND		5.00
106-93-4	1,2-Dibromoethane (Ethylene dibromide)	1	ND		5.00
74-95-3	Dibromomethane (Methylene bromide)	1	ND		5.00
110-57-6	trans-1,4-Dichloro-2-butene	1	ND		5.00
75-71-8	Dichlorodifluoromethane (Freon 12)	1	ND		50.0
75-34-3	1,1-Dichloroethane	1	ND		5.00
107-06-2	1,2-Dichloroethane (Ethylene dichloride)	1	ND		5.00
75-35-4	1,1-Dichloroethene (Dichloroethylene)	1	ND		5.00
156-60-5	trans-1,2-Dichloroethene	1	ND		5.00
78-87-5	1,2-Dichloropropane	1	ND		5.00
10061-01-5	cis-1,3-Dichloropropene	1	ND		5.00
10061-02-6	trans-1,3-Dichloropropene	1	ND		5.00
123-91-1	1,4-Dioxane	1	ND		500
100-41-4	Ethylbenzene	1	ND		5.00
591-78-6	2-Hexanone	1	ND		10.0
74-88-4	Iodomethane (Methyl iodide)	1	ND		5.00
78-83-1	2-Methyl-1-propanol (iso-Butyl alcohol)	1	ND		500
126-98-7	Methacrylonitrile	1	ND		5.00
75-09-2	Methylene chloride (Dichloromethane)	1	ND		5.00
108-10-1	4-Methyl-2-pentanone (MIBK)	1	ND		10.0
107-12-0	Propionitrile (Ethyl cyanide)	1	ND		10.0

ND denotes Not Detected at or above the reporting limit.

DF denotes Dilution Factor.

RL denotes sample Reporting Limit.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

3/30/99 12:55:17

Report of Method Blank
Pace Analytical Services, Inc. - New Orleans
Organic Protocol - Single Batch

Lab ID: 29306B1K12

Description: Water Method Blank

Episode: QHN

% Moisture: n/a

Method: Water GC/MS Volatile Organics

Batch: 29306

Units: ug/l

Prep Factor: 1

Leached: n/a

Prepared:

Analyzed: 13-Feb-99 1:06 KC

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
100-42-4	Styrene	1	ND		5.00
630-20-6	1,1,1,2-Tetrachloroethane	1	ND		5.00
79-34-5	1,1,2,2-Tetrachloroethane	1	ND		5.00
127-18-4	Tetrachloroethene (Perchloroethylene)	1	ND		5.00
108-88-3	Toluene	1	ND		5.00
71-55-6	1,1,1-Trichloroethane (Methyl chloroform)	1	ND		5.00
79-00-5	1,1,2-Trichloroethane	1	ND		5.00
79-01-6	Trichloroethene (Trichloroethylene)	1	ND		5.00
75-69-4	Trichlorofluoromethane (Freon 11)	1	ND		5.00
96-18-4	1,2,3-Trichloropropane	1	ND		5.00
108-05-4	Vinyl acetate	1	ND		10.0
75-01-4	Vinyl chloride (Chloroethylene)	1	ND		10.0
1330-20-7	Xylene (total)	1	ND		5.00

52 compound(s) reported

Report of Method Blank
Pace Analytical Services, Inc. - New Orleans
Organic Protocol - Single Batch

Lab ID: 29335B1

Description: Water Method Blank

Episode: QHN

% Moisture: n/a

Method: Water GC/MS Semivolatile Organics

Batch: 29335

Units: ug/l

Prep Factor: 1

Leached: n/a

Prepared: 11-Feb-99

Analyzed: 23-Feb-99 18:00 JA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
83-32-9	Acenaphthene	1	ND		10.0
208-96-8	Acenaphthylene	1	ND		10.0
98-86-2	Acetophenone	1	ND		10.0
53-96-3	2-Acetylaminofluorene	1	ND		10.0
92-67-1	4-Aminobiphenyl	1	ND		10.0
62-53-3	Aniline (Benzeneamine)	1	ND		10.0
120-12-7	Anthracene	1	ND		10.0
140-57-8	Aramite	1	ND		10.0
56-55-3	Benz(a)anthracene	1	ND		10.0
205-99-2	Benzo(b)fluoranthene	1	ND		10.0
207-08-09	Benzo(k)fluoranthene	1	ND		10.0
191-24-2	Benzo(g,h,i)perylene	1	ND		10.0
50-32-8	Benzo(a)pyrene	1	ND		10.0
100-51-6	Benzyl alcohol	1	ND		10.0
101-55-3	4-Bromophenyl phenyl ether	1	ND		10.0
85-68-7	Butylbenzylphthalate	1	ND		10.0
88-85-7	2-sec-Butyl-4-6-dinitrophenol (Dinoseb)	1	ND		10.0
106-47-8	4-Chloroaniline (p-Chloroaniline)	1	ND		10.0
111-91-1	bis(2-Chloroethoxy)methane	1	ND		10.0
111-44-4	bis(2-Chlomethyl) ether	1	ND		10.0
108-60-1	bis(2-Chloroisopropyl) ether	1	ND		10.0
59-50-7	4-Chloro-3-methylphenol (p-Chloro-m-cresol)	1	ND		10.0
91-58-7	2-Chloronaphthalene	1	ND		10.0
95-57-8	2-Chlorophenol (o-Chlorophenol)	1	ND		10.0
7005-72-3	4-Chlorophenyl phenyl ether	1	ND		10.0
218-01-9	Chrysene	1	ND		10.0
53-70-3	Dibenz(a,h)anthracene	1	ND		10.0
132-64-9	Dibenzofuran	1	ND		10.0
84-74-2	Di-n-butylphthalate	1	ND		10.0
95-50-1	1,2-Dichlorobenzene (o-Dichlorobenzene)	1	ND		10.0
541-73-1	1,3-Dichlorobenzene (m-Dichlorobenzene)	1	ND		10.0
106-46-7	1,4-Dichlorobenzene (p-Dichlorobenzene)	1	ND		10.0
91-94-1	3,3'-Dichlorobenzidine	1	ND		20.0
120-83-2	2,4-Dichlorophenol	1	ND		10.0
87-65-0	2,6-Dichlorophenol	1	ND		10.0
84-66-2	Diethylphthalate	1	ND		10.0
60-11-7	p-(Dimethylamino)azobenzene	1	ND		10.0
57-97-6	7,12-Dimethylbenz(a)anthracene	1	ND		10.0
119-93-7	3,3'-Dimethylbenzidine	1	ND		10.0

ND denotes Not Detected at or above the reporting limit.

DF denotes Dilution Factor.

RL denotes sample Reporting Limit.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

3/30/99 12:55:26

Report of Method Blank
Pace Analytical Services, Inc. - New Orleans
Organic Protocol - Single Batch

Lab ID: 29335B1

Description: Water Method Blank

Episode: OHN

% Moisture: n/a

Method: Water GC/MS Semivolatile Organics

Batch: 29335

Units: ug/l

Prep Factor: 1

Leached: n/a

Prepared: 11-Feb-99

Analyzed: 23-Feb-99 18:00 JA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
122-09-8	alpha, alpha- Dimethylphenethylamine	1	ND		10.0
105-67-9	2,4-Dimethylphenol	1	ND		10.0
131-11-3	Dimethylphthalate	1	ND		10.0
99-65-0	1,3-Dinitrobenzene (m-Dinitrobenzene)	1	ND		10.0
534-52-1	4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	1	ND		25.0
51-28-5	2,4-Dinitrophenol	1	ND		25.0
121-14-2	2,4-Dinitrotoluene	1	ND		10.0
606-20-2	2,6-Dinitrotoluene	1	ND		10.0
117-84-0	Di-n-octylphthalate	1	ND		10.0
117-81-7	bis(2-Ethylhexyl)phthalate	1	ND		10.0
97-63-2	Ethyl methacrylate (2-Propenoic acid)	1	ND		10.0
62-50-0	Ethyl methanesulfonate	1	ND		10.0
206-44-0	Fluoranthene	1	ND		10.0
86-73-7	Fluorene	1	ND		10.0
118-74-1	Hexachlorobenzene	1	ND		10.0
87-68-3	Hexachlorobutadiene	1	ND		10.0
77-47-4	Hexachlorocyclopentadiene	1	ND		10.0
67-72-1	Hexachloroethane	1	ND		10.0
70-30-4	Hexachlorophene	1	ND		10.0
1888-71-7	Hexachloropropene	1	ND		10.0
193-39-5	Indeno(1,2,3-cd)pyrene	1	ND		10.0
78-59-1	Isophorone	1	ND		10.0
120-58-1	Isosafrole	1	ND		10.0
91-80-5	Methapyrilene	1	ND		10.0
56-49-5	3-Methylcholanthrene	1	ND		10.0
80-62-6	Methyl methacrylate	1	ND		10.0
66-27-3	Methyl methanesulfonate	1	ND		10.0
91-57-6	2-Methylnaphthalene	1	ND		10.0
95-48-7	2-Methylphenol (o-Cresol)	1	ND		10.0
108-39-4	3-Methylphenol (m-Cresol)	1	ND	A7	10.0
106-44-5	4-Methylphenol (p-Cresol)	1	ND		10.0
91-20-3	Naphthalene	1	ND		10.0
134-32-7	1-Naphthaleamine (1-Naphthylamine)	1	ND		10.0
91-59-8	2-Naphthaleamine (2-Naphthylamine)	1	ND		10.0
130-15-4	1,4-Naphthoquinone	1	ND		50.0
88-74-4	2-Nitroaniline (o-Nitroaniline)	1	ND		25.0
99-09-2	3-Nitroaniline (m-Nitroaniline)	1	ND		25.0
100-01-6	4-Nitroaniline (p-Nitroaniline)	1	ND		25.0
98-95-3	Nitrobenzene	1	ND		10.0

ND denotes Not Detected at or above the reporting limit.

DF denotes Dilution Factor.

RL denotes sample Reporting Limit.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

3/30/99 12:55:31

Report of Method Blank
Pace Analytical Services, Inc. - New Orleans
Organic Protocol - Single Batch

Lab ID: 29335B1

Description: Water Method Blank

Episode: QHN

% Moisture: n/a

Method: Water GC/MS Semivolatile Organics

Batch: 29335

Units: ug/l

Prep Factor: 1

Leached: n/a

Prepared: 11-Feb-99

Analyzed: 23-Feb-99 18:00 JA

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
88-75-5	2-Nitrophenol (o-Nitrophenol)	1	ND		10.0
100-02-7	4-Nitrophenol (p-Nitrophenol)	1	ND		25.0
56-57-2	4-Nitroquinoline-1-oxide	1	ND		10.0
924-16-3	N-Nitrosodi-n-butylamine	1	ND		10.0
55-18-5	N-Nitrosodiethylamine	1	ND		10.0
62-75-9	N-Nitrosodimethylamine	1	ND		10.0
86-30-6	N-Nitrosodiphenylamine (Diphenylamine)	1	ND	A10	10.0
621-64-7	N-Nitroso-di-n-propylamine	1	ND		10.0
10595-95-6	N-Nitrosomethylethylamine	1	ND		10.0
59-89-2	N-Nitrosomorpholine	1	ND		10.0
100-75-4	N-Nitrosopiperidine	1	ND		10.0
930-55-2	N-Nitrosopyrrolidine	1	ND		10.0
99-55-8	5-Nitro-o-toluidine	1	ND		10.0
608-93-5	Pentachlorobenzene	1	ND		10.0
76-01-7	Pentachloroethane	1	ND		10.0
82-68-8	Pentachloronitrobenzene	1	ND		10.0
87-86-5	Pentachlorophenol	1	ND		25.0
62-44-2	Phenacetin	1	ND		10.0
85-01-8	Phenanthrene	1	ND		10.0
108-95-2	Phenol	1	ND		10.0
106-50-3	p-Phenylenediamine	1	ND		10.0
109-06-08	2-Picoline (2-Methylpyridine)	1	ND		10.0
23950-58-5	Pronamide	1	ND		10.0
129-00-0	Pyrene	1	ND		10.0
110-86-1	Pyridine	1	ND		10.0
94-59-7	Safrole	1	ND		10.0
95-94-3	1,2,4,5-Tetrachlorobenzene	1	ND		10.0
58-90-2	2,3,4,6-Tetrachlorophenol	1	ND		10.0
95-53-4	o-Toluidine	1	ND		10.0
120-82-1	1,2,4-Trichlorobenzene	1	ND		10.0
95-95-4	2,4,5-Trichlorophenol	1	ND		25.0
88-06-2	2,4,6-Trichlorophenol	1	ND		10.0
99-35-4	1,3,5-Trinitrobenzene (sym-Trinitrobenzene)	1	ND		10.0

111 compound(s) reported

ND denotes Not Detected at or above the reporting limit.

DF denotes Dilution Factor.

RL denotes sample Reporting Limit.

Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

3/30/99 12:55:35

Report of Quality Control
Pace Analytical Services, Inc. - New Orleans
Multiple Parameters - Multiple Batches

Episode: QHN

Parameter Name	Batch	Blank	Units	LCS	LCS	MS	MS	MSD	Dup	QC Limits		RPD	Qu
				Spike	%Rec	Spike	%Rec	%Rec	RPD	LCS	MS/MSD		
Mercury	29260	ND	ug/l	1.00	87		1.00	88	87	1	80-120	75-125	20
Mercury	29260	ND	mg/l	0.0010	96		0.0010	41 *			80-120	50-150	20
Aluminum	29274	ND	ug/l	1000	101		2000	90	88		80-120	75-125	20
Antimony	29274	ND	ug/l	1000	85		500	69 *	67 *		80-120	75-125	20
Arsenic	29274	ND	ug/l	1000	93		2000	88	88		80-120	75-125	20
Barium	29274	ND	ug/l	1000	98		2000	89	87		80-120	75-125	20
Beryllium	29274	ND	ug/l	1000	99		50.0	91	89		80-120	75-125	20
Cadmium	29274	ND	ug/l	1000	96		50.0	80	80		80-120	75-125	20
Calcium	29274	ND	ug/l	4000	84						80-120	75-125	20
Chromium	29274	ND	ug/l	1000	104		200	650 *	350 *		80-120	75-125	20
Cobalt	29274	ND	ug/l	1000	99		500	78	78		80-120	75-125	20
Copper	29274	ND	ug/l	1000	101		250	93	94		80-120	75-125	20
Iron	29274	ND	ug/l	1000	100		1000	95	94		80-120	75-125	20
Lead	29274	ND	ug/l	1000	103		500	93	93		80-120	75-125	20
Magnesium	29274	ND	ug/l	2000	95						80-120	75-125	20
Manganese	29274	ND	ug/l	1000	104		500	101	99		80-120	75-125	20
Nickel	29274	ND	ug/l	1000	101		500	93	93		80-120	75-125	20
Potassium	29274	ND	ug/l	2000	99						80-120	75-125	20
Selenium	29274	ND	ug/l	1000	89		2000	85	86		80-120	75-125	20
Silver	29274	ND	ug/l	500	92		50.0	76	76		80-120	75-125	20
Sodium	29274	ND	ug/l	2000	99						80-120	75-125	20
Thallium	29274	ND	ug/l	1000	119		2000	103	103		80-120	75-125	20
Vanadium	29274	ND	ug/l	1000	101		500	90	90		80-120	75-125	20
Zinc	29274	ND	ug/l	1000	104		500	87	85		80-120	75-125	20

Report Qualifiers
Pace Analytical Services, Inc. - New Orleans
Single Episode

Episode: QHN

Qualifier	Qualifier Description
A10	N-Nitrosodiphenylamine is reported as diphenylamine.
A7	3-Methylphenol and 4-methylphenol coelute under the conditions used for analysis, therefore the precise isomer in the sample cannot be determined. The sample concentration is arbitrarily reported as 4-methylphenol.
D1	The analysis was performed at a dilution due to the high analytic concentration.
D2	The analysis was performed at a dilution due to the presence of matrix interferences.
D6	The sample was analyzed at a dilution based upon the screening information.
J	This estimated value for the analyte is below the adjusted reporting limit but above the instrument reporting limit. (Organics Only)
N	See narrative for a detailed explanation.
Q1	The matrix spike recoveries are poor. Acceptable method performance for this analyte has been demonstrated by the laboratory control sample recovery.
Q3	The matrix spike recoveries are poor due to the presence of this analyte in the sample at a concentration greater than 4 times the spiked amount. Acceptable method performance for this analyte has been demonstrated by the laboratory control sample.

Pace Analytical

Pace f1

CHAIN-OF-CUSTODY RECORD Analytical Request

Client	Eco-Systems, Inc.			Report To:	John Ryan			Turn around Time		
Address	4294 Lakeland Dr., Site 200 Jackson, MS 39208			Bill To:	John Ryan			<input type="checkbox"/> 24 Hours		
								<input type="checkbox"/> 48 Hours		
								<input type="checkbox"/> 3-5 Days		
								<input type="checkbox"/> 1 Week	2 Weeks	
Phone	601-936-4440			P.O. # / Billing Reference	TAC-99023			<input checked="" type="checkbox"/> Not Applicable	3 Days	
Sampled By (PRINT):	John Ryan (Wade) Steinhriede			Project Name / No.	Q1 '99 Sampling			Requested Due Date:		
Sampler Signature				Date Sampled						
ITEM NO.	SAMPLE DESCRIPTION	TIME	MATRIX	PACE NO.	NO. OF CONTAINERS			REMARKS		
					UNPRESERVED	H ₂ SO ₄	HNO ₃	VQA (HCl)	NaOH	Na ₂ SO ₃
1	TAC-Sumur2-Gw-Φ5-Φ2	1110	Li	62	1	3				
2	TAC-Sumur2-Gw-Φ1-Φ2	1210	Li	62	1	3				
3	TAC-Sumur2-Gw-Φ2-Φ2	1410		62	1	3				
4	TAC-Sumur2-Gw-Φ2-Φ2	1410		62	1	3				
5	TAC-Sumur2-Gw-MS-Φ2	1410		62	1	3				
6	TAC-Sumur2-Gw-MSD-Φ2	1410		62	1	3				
7	TAC-Sumur2-Gw-Φ4-Φ2	1415		62	1	3				
8	TAC-Sumur2-TB-Φ2	1500		62	1	2				
COOLER NOS.	BAILERS	OUTDATE	SHIPMENT METHOD	ITEM NUMBER	RElinquished BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION		
					ESL	04/09/99	1755	FCATX		
					FEDTX	Annex W, Photo Face 315/94 11/15				
										SAMPLE CONDITION
Temp: _____ °C	Received on ice: <input checked="" type="checkbox"/> N	Sealed Cooler: <input checked="" type="checkbox"/> N	Samples Intact: <input checked="" type="checkbox"/> N	Temp: _____						

*Additional comments: TAC-Sumur2-AB-Φ13
Other Sample: Help for Analysis
APPX Metals/VoAs/SVCAs
bottles = 5*

- Metals = RCRA ONLY

SEE REVERSE SIDE FOR INSTRUCTIONS